

ENGRAVED

GEMS

DUFFIELD

OSBORNE



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ENGRAVED GEMS

SIGNETS, TALISMANS AND ORNAMENTAL
INTAGLIOS, ANCIENT AND MODERN

BY

DUFFIELD OSBORNE

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TO MY FRIENDS
HARRY L. PANGBORN
AND
WILLIAM GEDNEY BEATTY
TO WHOSE AID AND ENCOURAGEMENT
THIS BOOK OWES MUCH

PREFACE

DURING the Eighteenth Century, the so-called "Century of the Dilettanti", and down to the fifth decade of the nineteenth, no branch of the art humanities occupied so prominent a place as did the study and appreciation of the engraved gems of classic times. In their numbers, in the perfection of their preservation, and in their intimate relations to the personal lives of the old Greeks and Romans, they appealed alike to the student of archaeology and to the lover of antiquity for its own sake; while the collector, following fast in the tracks of such leadership, soon made them the most fashionable of his desiderata. Every man who had any pretension to culture and taste posed as a connoisseur; kings and queens felt themselves lacking in their duty to archaeology and art unless they formed and fostered national cabinets. Even in ancient Rome there were collectors. Scaurus, the stepson of Sulla, is the first of whom we find record. Later, Mithridatēs, the great king of Pontus, had a collection which his conqueror, Pompey, seized and consecrated in the Capitol. Julius Cæsar made no fewer than six, all of which he gave to the temple of Venus Genetrix, and Marcellus, the son of Octavia, presented one to the temple of the Palatine Apollō. With the revival of taste and learning that followed the Middle Ages, the interest in engraved gems sprang up again. It found favor with the humanist popes and the princes of the house of Medici. Lorenzo the Magnificent was a most discriminating collector not only of the antique but also of the best work of his own time for which end he sought to bring the best artists to Florence. The LAVR. MED inscribed on many stones indicate that they once belonged to this famous amateur. Michael Angelo went into ecstasies over the Minerva head obtained by Cellini in 1524 from some workmen in a vineyard. Urbane Italian despots and rude Hapsburg emperors, Charles IX, Henry IV, and Louis XIV of

France gave their enthusiastic patronage; Catherine II founded the famous Russian collection; Frederick the Great supported and enriched the cabinet begun by the "Great Elector"; Josephine was an eager if not very intelligent seeker; but perhaps the best evidence of the universality of the craze is that even poor, bucolic George III felt called upon to join the ranks of an army of whose aims he knew little, and with whose enthusiasm he could have but the most perfunctory sympathy. The words of Goethe when he writes of Hemsterhuis and his collection of gems, owned later by the Princess Galitzin, are full of weight: "With a peculiarly acute delicacy of feeling this estimable man was led unweariedly to strive after the intellectual and moral as well as the sensuous and æsthetical. If we are to be imbued with the former we ought constantly to be surrounded by the latter. To a private person, whose movements are confined within a narrow sphere and who even when travelling finds it difficult to dispense with an habitual enjoyment of art, a collection of engraved gems is a great boon. He is everywhere accompanied by what gives him the greatest enjoyment and is a valuable means of instruction without being cumbersome, and he can continually enjoy a very precious possession." Speaking further of the Galitzin cabinet, Goethe says: "It could not be denied that imitations of larger and more valuable ancient works of art which would otherwise have been lost to us forever were preserved, like jewels, in this narrow compass. . . The brawniest Hercules, crowned with ivy, could not deny his colossal origin. . . I could not conceal the fact that I had here entered quite a new field which interested me exceedingly and only regretted the shortness of my sojourn which would deprive me of the opportunity of examining this new class of objects more closely."

At last came the collapse. It followed the sale of the Poniatowski collection in London, in 1839, and the resultant exposure. What had happened was what always happens when a sane taste has degenerated into a mere collecting mania. Eagerness and lack of knowledge on the part of wealthy collectors, the enormous prices paid, had called into activity a horde of

more or less competent forgers, who battered on the ignorance and liberality of their dupes. Clever Italian gem-cutters began as emulators—often almost worthy ones—of the ancient artists, and ended as fraudulent imitators: but it needed the audacious absurdities of a Prince Poniatowski to open the eyes of the multitude. These had long accepted blindly any and everything in reason and out, but when three thousand gems were thrown suddenly on the market, all showing similar motive and workmanship, all foreign in form to those used by the ancients, and done in a spirit the farthest from classic art, yet each bearing the signature of some supposed ancient artist, then even the blindest saw. Every would-be connoisseur felt the ground sinking beneath his feet; even many discriminating students knew not what to believe; faith in the genuineness of all gems and all collections was shattered as by a blow, and the cameo or intaglio that in 1830 would have brought £1,000, in 1850 could hardly be given away. This is, I think, the most spectacular instance of the changes of fashion in connoisseurship, just because, having a much sounder foundation than most collecting fashions, the taste for engraved gems lived longer and went farther, gave freest scope for abuses, and, naturally enough, provoked the most extreme of reactions.

During the years that have passed between then and now, knowledge that there are such things as antique intaglios and knowledge of what they are, well-nigh died in the public mind. Only the student, the archæologist, and the lover whose faith nothing could shake, remained, and to these fell, and still falls, the harvest to be reaped in a field where the grain is rich and the reapers are few. The forgers soon dropped their now unprofitable craft and died; no new ones took their places; the very art of gem-cutting was left to a workman here and there whose ability was practically limited to producing a mediocre head or crude figure, a monogram or a coat of arms. Our own St. Gaudens, when a very young man, engraved a few gems, but it cannot be said that he ever attained any eminence in the art.

Meanwhile the ploughed ground, the excavations, and the tombs continued to yield their hidden store, and the knowledge

of the student advanced, until he could smile at the efforts that had deceived men of the preceding generation. He gathered and still gathers, for a mere song, objects than which none is more interesting and fascinating.

In these days we seek for Chinese porcelains, for Japanese prints, for Tanagra figurines, for Sheffield plate, pewter, copper, textiles, sword-guards and old furniture—an endless list, and the forger forges merrily on, his skill and his plenteousness governed, as ever, by the number of possible dupes and the prices to be had for his wares. It will be a sad day for the admirer of ancient gems, when, in the rolling world of fashion, the collecting tide sets again in their direction, as it inevitably will.

Time must elapse, however, before an indiscriminate demand can rear a new generation of forgers clever enough to meet the knowledge and experience we now have. The hare has slept long and the tortoise has won a lead that his swift-footed rival cannot soon overcome. Meanwhile, happy is he whose interest and tastes, formed on sane lines and with a just appreciation of relative values, are not subject to the mandates of fashion. To him, be he rich or poor, is the possibility of the most satisfactory and best attainment of his heart's desire.

It is for such that this book is written. The works of Dr. Charles W. King are out of print and rarely attainable. Then, too, while there is much of value in their pages, there are also many errors that the thirty years that have passed since he wrote have corrected; a mass of new knowledge that has been gained. The few other books in English on the subject are more or less open to the same criticism, are limited in scope, or are worthless; while the monumental work of Dr. Adolf Furtwängler, published at two hundred and sixty marks, has never been translated from the German, and, in its devotion to what may be called the more "important" art side of the subject, it ignores almost entirely the great mass of cruder specimens among which the individual gem-lover must look for most of his finds and for his illumination, and which I believe to be not less interesting, from many stand-points, than the best productions of this classic art.

In the matter of ancient proper names one is always beset by the dilemma whether to follow the ancient nomenclature and spelling at the cost of seeming pedantic or whether to adopt frankly the Latinized modern. In a work like this the former seems imperative, but I have taken the liberty of a measure of eclecticism in a few such cases as centaur for kentauros, cyclops for kuklōpes and caduceus for kērukeion. I have also taken the liberty of dropping the final n in names like Ploutōn, Apollōn and Platōn. The long marks over the e and o denote, as usual, the Greek ēta and ōmega. When, however, I come to consider Roman gems, I have accepted the Latinized Greek names. Both forms will thus generally be found, each in the connection in which it may be most useful to the student of inscriptions. In the cases of some of the most familiar geographical names, like Bœotia, for instance, where the Greek spelling would affect the pronunciation, I have let the œ stand for the Greek oi—also Cyprus for Kupros etc.

In closing my preface I must acknowledge my indebtedness, first, to the works of Messrs. Arthur J. Evans and D. G. Hogarth, whose discoveries in Crete have opened a new field and carried the knowledge of European gem-engraving back many centuries. Whoever would write today must rely on their investigations in the province of Cretan glyptics. On Dr. Furtwängler I shall draw largely in the matter of stones, shapes and subjects characteristic of, more especially, the earlier periods. His equipment and his opportunities for examination of a great number of examples make the results of his observations in these lines invaluable to one who would present a full view of the subject, and the obligation cannot be too frankly or too broadly admitted. When it comes to the deductions and theoretical conclusions so dear to the German scientist, I must take the liberty of a frequent softening of his generalizations and of occasional divergence. Dr. King's *Gnostics and Their Remains* furnishes me with many of the inscriptions on Gnostic gems which I shall find necessary to quote, and his *Antique Gems and Rings, Handbook of Engraved Gems and Early Christian Numismatics*, however full of

errors, have all been valuable sources of information. On the subject of Mediæval gems I have taken advantage of the investigations of M. Lecoy de la Marche and M. Germain Demay and, to a less degree, of the work on seals of Mr. W. de G. Birch. I wish further to make acknowledgment to Mr. Harry L. Pangborn for many suggestions, especially in the field of Mediæval glyptics, as well as for invaluable aid in other directions; also to Mr. Lacey D. Caskey of the Boston Museum of Fine Arts for his painstaking courtesy in connection with the gems in that institution which I have used for illustration. To the Boston Museum, also, and to the Ashmolean Museum of Oxford I am indebted for casts of gems in those collections presented to me for photographing, and to the following private collectors for the loan of gems to make casts for the same purpose, viz., Mr. W. Gedney Beatty, Prof. George N. Olcott, Prof. Herschel Parker, Mr. Harry L. Pangborn, Mrs. Henry Draper, Mr. Thomas E. H. Curtis and Mr. Nestor Sanborn.

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ENGRAVED GEMS

INTRODUCTION

FROM the earliest times two ideas have advanced side by side in the desire of mankind for precious and semi-precious stones. Most of these are beautiful in themselves. Hence they have been sought as ornaments. Many of them, from their rarity, their unusual colors, and their hardness, have been looked upon as amulets that can avert evil or talismans that can bring good fortune. Later, when advancing knowledge of the arts enabled the workman to fashion the shapes and engrave the surface of the stones, both ideas received a new impetus. It was obvious that the ornamental element could be enhanced by the skill of the artist and, also, that the subject engraved, were it the figure or attribute of some god, a written charm or a magic symbol, might induce or enhance the luck-bringing quality, above all things to be desired. Later, yet a third element was added.

With the first existence of the institution of personal property and the beginnings of business, social and political relations, arose the need to each man of a device which, by its impression on clay or some other soft and hardening substance, would identify his possessions, his agreements and his communications. Here again the engraved surfaces of precious or semi-precious stones offered the best means to the end. Their hardness made them durable and difficult to imitate, their small size made them easy to carry, and the possible combination of ornament, amulet and signet was, naturally, convenient and attractive.

Probably the earliest development of the signet idea was among the Sumerians of Chaldæa or the Egyptians and is dated rather speculatively about 5000 B. C. The form adopted was the cylinder, first of soft and, later, of hard stone, pierced

through its length so that it could be suspended by a cord from wrist or neck. It would seem that the shape may have had its origin in an earlier use of bits of reed the peculiar lines of whose surfaces could be rolled on moist clay for purposes of identification and, like the serrated margins of indenture deeds, would be next to impossible to counterfeit. Dr. Stewart Culin first drew attention to the arrow shaft, with its owner's mark, as a most plausible source of the idea, a suggestion which other writers have adopted, generally without credit to its originator.

The use of the cylinder spread over western Asia and Egypt, where Menes, the first king of the upper and lower countries, had such a signet. At a later time the Asiatic favored a conical seal, also pierced and suspended, but the study of these forms, together with the mythology and writings pictured on them, is a separate branch of the subject calling for the Oriental specialist, and the work of Dr. William Hayes Ward fills the field most satisfactorily.

In Egypt a national form developed. The shape of the Egyptian beetle or scarab began to prevail from the beginning of the Twelfth Dynasty and was soon universally adopted from religious motives. It was the emblem of the Sun, the presiding god; it was the emblem of eternity and of strength, but Egyptian work in intaglio was pretty much confined to hieroglyphics, symbols and decorative designs and, hence, never rose to high artistic excellence. Here again is a field for the specialist in the language and archæology, and the scarab form comes into our province only in so far as its use spread into the Phœnician colonies, Greece, and Etruria, where the intaglio took upon itself the character and quality of Hellenic art. As a rule we have to do with stones cut to be set in rings of gold, silver, bronze, iron and, rarely, even lead.

A word may be added as to cameos, a later development. In most works on the subject of engraved gems, these are treated at considerable length; but such miniature relief sculpture had no further purpose than ornamentation, except so far as this included portraiture, and they lack almost entire-

ly the peculiar interest that the intaglio presents. Incidentally, the number of ancient cameos is comparatively small. Most of the specimens we see are Renaissance or modern, since the forgers, looking for ready remuneration and to the more showy manifestations of their craft, found in the cameo a much more profitable field for their efforts and one that required less study, knowledge and caution than did the intaglio with its intimate associations with the life and thought of antiquity, with the very soul of the classic world.

The limits, then, of this work, for I conceive the value of such a treatise is largely a matter of limitations, should be set by the phrase "Classic and Modern Intaglios." In these we shall find all the art, all the mystical elements, and all the peculiar personal associations which the use of signets involved.

INTEREST IN ANTIQUITY

THE interest in what we call "antiquities" may be broadly classified under three heads.

First, that of the student: the scientific archæologist, who looks upon such objects as a means of knowledge. To him the study of Greek, Roman and Etruscan intaglios affords many sources of information. In the subjects pictured, from, let us say speculatively, 3000 B. C., may be traced accurately the trend of thought of each period and nation. We know the things that interested the Greek of the Mycenæan Age and the Roman of the Lower Empire. Perhaps it was art pure and simple, perhaps religion, as voiced in sacerdotal subjects and the figures of gods and their attributes, grading down to the grosser superstitions evidenced by many talismans and amulets. Poetic taste was gratified by scenes from the Homeric and other legends. The idea of personal subservience and flattery shows itself in the many instances where the subject wore his monarch's portrait, the client his patron's, while simpler and more material preferences produced numerous genre pictures of everyday life. The adherent of the green or the blue wore his favorite horse or quadriga, the hunter

or the tradesman, some representation of his play or work, and so through every human motive and taste that fashion or personality has born and nourished.

It is in this connection that we find much of the interest and value of the great mass of the poorer—even of the contemptible—work from an art standpoint: the gems that we commonly run across and which Professor Furtwängler and other writers largely ignore.

Again, in the work itself it is easy to follow the ebb and flow of civilization as evidenced by the merit of the art and the skill of the craftsman, and here, too, it seems to me a great mistake to scorn the commonplace. Each gem has its lesson to teach, whether it be from the hand of Dexamenos or from that of some wretched bungler in the Diocletian Forum.

In connection with the art side of the subject there is also to be considered the fact that famous statues and paintings were often reproduced on these gems. The statue is mutilated or destroyed, the painting has perished, but we have learned and may yet learn much of the masterpieces of antiquity from the sard or the plasma whose hardness and minute dimensions have saved it for a later age.

In portraiture alone there is an exhaustless fund of interest and of archæological information. The faces of rulers and great men look from gems only less often than from coins, while the obvious advantage of bearing one's own likeness for a signet has left us a multitude of portraits of humbler characters with always the hope that an identification here and there may reveal the lineaments of some man in whom history has created a deathless interest.

Finally the knowledge of costumes, of the forms of weapons and articles for every conceivable use, is obviously advanced by this study, and in the deciphering of the inscriptions borne by many gems lies an unlimited field for conjecture and research. The signatures alone have revealed the names of many artists that would otherwise have been lost.

Turning now from the standpoint of the student to that of the collector, little needs to be said. His interest is obvious,

and to scorn or ignore him is unfair. He has accomplished his good and his evil: good in the stimulation to research that, without his eagerness and his resources, might have been long delayed or never attempted: evil, in that the same eagerness and the limitation of his requirements have resulted in much superficial and often destructive work whereby opportunities for illumination have been obscured or lost. The *Hermēs of Praxitelēs* was identified positively only from the fact of its discovery just where Pausanias wrote that it stood. Had it been found by some ignorant excavator and smuggled out of the country for private gain, we would have had a beautiful example of ancient art, but probably the world would never have known it for the very work of the great master.

But there is another reason why mere collecting, even on its crudest lines, must not be unqualifiedly condemned. It is the most obvious source and beginning of interest, often of real knowledge. That alone marks it for a commendable taste whose abuses only should be attacked and circumscribed. You can hardly become the owner of a single gem without a growing desire to know something of the story it has to tell, and no one is apt to become a collector in such a field without having somewhere in his nature, to be revealed and cultivated, a taste for the secrets of antiquity and a curiosity about its message for to-day.

This brings me to a consideration of the third type of antiquarian, combining in varying proportions the attributes of both student and collector. For want of a better term let us call him the Romantic Archæologist. It is to such that the classic intaglio appeals most strongly, if only because of each gem's close personal associations with some individual who lived from, say, two to five thousand years ago: a man of one of those races that have shaped our own life and thought, our politics and our ethics, all that make us what we are. I take it there can be little beyond a purely scientific interest in what we may call the independent and dead civilizations: that of the Incas, and, in some degree, those of many Oriental peoples, but Greece and Rome, of however long ago,

can never be disassociated from ourselves, must live always in the mind of every one to whom history and biography mean anything. Here it is that the spirit of romance appeals most powerfully and in direct proportion to the measure in which we can make it particular and real. In this connection each gem, so far as it can speak and be understood, has its story to tell, and the imagination of the true lover of romance thrills at the touch of the bit of sard or chalcedony that has been part of scenes that history has made immortal: a thing that some man who lived then has had fashioned according to his individual needs or taste or whim; and when one can come even closer than this and spell out ancient truths, however trivial, the thrill grades upward into a sensation akin to awe.

I wonder what a man's feeling would be could he become the owner of the signet of Julius Cæsar—that famous stone engraved with a Venus Victrix, his patron goddess? Very probably it is still in existence somewhere, perhaps unrecognized in some collection, for we know nothing of it beyond the device and the certainty that it was a work of the best art. Perhaps tomorrow the plough may turn it up. We have the signet of the Emperor Constantius II, cut in a beautiful sapphire and showing him spearing a wild boar. A recumbent female figure typifies the city of Cæsarea, near which the exploit was accomplished, and all is made clear by the inscription the stone bears. A small sard intaglio of a Victory, engraved in the style of consular art, said to have been found in the sarcophagus of Lucius Scipio Barbatus, Consul 298 B. C., was, if the record be straight, undoubtedly his signet; while King, in pp. 146-147 of his *Handbook of Engraved Gems*, indulges in one of those speculations always most fascinating and which looks toward the identification of a sard, engraved with a portrait (?) head and half the circumference of a shield (Pl. XVIII, 25), with the signet of the great Marcellus, used after his death by Hannibal upon forged letters which he sent to various towns.

In Chapter III of Part III of this work, I give a list of the devices worn by those historical characters of whose signets

we have any record, but even the far slighter and much less consequential stories of two gems in my possession may be of interest here, as indicating the possibilities.

The first is a mottled jasper, red and yellow, somewhat chipped: a stone favored by the Greek gem-cutters of the fifth century B. C. The character of the work, though rudely and cheaply done, does not prohibit dating it from that period, and the fact that the gem is a ring-stone, without border, indicates the end of the century. It shows a male figure wearing a long gown and pouring some liquid on the ground from a conical vessel (Pl. VIII, 8). At once our thought turns to that closing ceremony of the Eleusinian Mysteries, when libations of water were poured toward the East and West from top-shaped vessels. The form of the vessel, the sacerdotal character of the dress, and the peculiarity of the design all point to its being a representation of this act, and such a device would be taken for a signet only by an initiate. Now at the time when we have guessed our gem to have been cut and worn none but a Greek was eligible for initiation, and, doubtless, Athens furnished the great majority of neophytes. Add to this that the stone was procured at Taormina, was probably found in the neighborhood, and that the famous Athenian expedition against Syracuse wintered, 415-416 B. C. at Naxos, the site of which lies just below, and there seems fair reason, at least, to fancy that this very gem was the signet of a soldier of that ill-fated army; not a leader or a man of wealth, but a well-to-do citizen of the greatest city the intellectual world has ever known, who had come to lay down his life for her empire in a field where misguided ambition led her to her defeat and to the beginning of her decadence. One does not often find an object with more dramatic associations than this.

The second gem is a rather crude figure of a horse bearing a palm branch (Pl. XXVII, 13). The workmanship shows it to be of the Roman period, when the interest in the games of the circus had become a popular passion. Evidently the owner of this signet had taken his favorite racer for a device, the palm

branch indicating some victory—some “big-killing”, as our racing men of today might phrase it. In the field are the three Greek letters, A T P, reversed so as to be read in an impression. Possibly this is an abbreviation of the owner’s name, but, in view of the subject and motive, it would be more likely to be that of the horse, and the chance of deciphering it naturally appealed to me. If I found an appropriate name, I reasoned, the probability would be much strengthened. Now in Greek there are not many words that begin with A T P. Outside of a few proper names, none of which seemed very apt, the problem resolved itself into two more striking alternatives. *Ἀτρίαντρος*, “the Unconquered”, struck me as being one that in its very ultimateness might expose an owner to the constant chance of a rather ridiculous anti-climax. *Ἀτρυτώνη*, “the Tireless” or “the Unwearied”, an epithet of Athēna, was in every way appropriate, and I believe it to be the correct solution, one that seems to me to add a definite bit of romantic glamor to an otherwise ordinary gem.

FORGERIES

I now approach a topic most closely interwoven with the study and collecting of gems, as it is with every other branch of archæology and connoisseurship. Between the student, the connoisseur, and the collector on the one hand, and their arch enemy the forger on the other, the contest is bitter and, seemingly, unending.

I have suggested above why the danger is less, at the present time, in the case of engraved gems than in other and more fashionable fields, but we cannot deny that it is a real danger to most of those for whom this book is written: people whose interest in the subject may be inchoate and whose knowledge is, as yet, slender. These have a right to look for some suggestions that may guide and fortify them, as far as possible, against perils that strike at the very roots of the interest we have and the pleasure we find in such pursuits.

Let me begin with the indisputable statement that it is

always *possible*, granting the highest measure of knowledge on a subject, the greatest technical skill, and the utmost care, for a forger to produce work in any line that will deceive the most erudite and experienced critic. Then let me add that practically he never quite succeeds in doing it. Somewhere or other he slips, and, sooner or later, detection follows.

Now if you ask for a hard and fast test or rule that can be applied, such as certain writers have been prompt to give, I can only answer that the very existence of such a test or rule would negative my statement, because the forger would need only to learn it and meet its requirements. It is in study and knowledge of the subject—of the many minute elements that argue for genuineness—that our safety lies, and in the resultant instinct—a sort of collector's sixth sense—that is finally acquired from the handling and analysis of the objects themselves.

For the reason that a rational classification, however arbitrary, is apt to help in the discussion of such matters, if only by formulating our ideas, let me divide intaglios into five classes from the standpoint of their genuineness.

First: those unquestionably ancient.

Second: those ancient in all reasonable probability.

Third: those whose antiquity is a matter of more or less balancing doubts.

Fourth: those that are probably forgeries.

Fifth: those that are certainly modern work.

For the beginner all gems are in the third class, whence, aided by the opinions of students and experts and by his own growing knowledge, he will find them gravitating toward either end of the list. It is only honest to say, however, that, even for the wisest and most erudite, there remain a few that he cannot honestly take from class three, and these are, naturally, the least desirable of all. Classes four and five are always interesting for purposes of study and comparison, but the best advice is to try to confine your purchases to classes one and two. You will make enough mistakes to fill classes three, four and five quite satisfactorily, and the experience you pay

for is the best foundation for ultimate knowledge. I would advise the beginner never to give much over five dollars—better one or two—for a gem. Be thankful for the lack of demand that enables you to get them now for such prices, and consider that it is upon finer gems, those for which the forger hopes to get a good price, that he can afford to expend his best knowledge and his most deceptive arts.

In taking advice always bear in mind the limitations of the dealer. I doubt if any trade is more demoralizing than that in antiquities, and, however honest the man, there is always the temptation to believe what he wants to believe—what it is to his financial interest to believe—especially when it is a mere matter of an opinion or a not very perilous guarantee. Then, too, in view of the small number of gems that come into his hands, the few sales and the trivial prices, I doubt if any dealer, certainly none in America, is an expert. His honest opinion is practically valueless except in the most obvious cases. A point worth considering, however, is that, unless he be consciously and deliberately dishonest, we can often learn something from the locality from which a gem has come, and the fact that the sources of supply of certain dealers are largely local sometimes helps toward diagnosis. A case in point is a little head of Athēna, once in my possession, that, at first glance, made me strongly suspicious that it was eighteenth century work. The seller, a dealer, stated that he had got it at Aintab, the ancient Antiochia-ad-Taurum, in Asia Minor. I believed the man to be honest, but, in any event, if he had been going to lie as to the place of discovery, the chances are immeasurable that he would have chosen some point that was more generally known: a name that would have meant something to a buyer instead of one that few Americans are familiar with. In fact, I had observed that "Antioch" and "Tyre" were the sources of most of his gems and I suspected them to be his stock provenances when he didn't know. Granting, then, the truth of his statement, as I think it may be granted, the probability of a modern forgery ever finding its way to Aintab is so slender that it may

be practically ignored. I can add that a closer and more careful study of the stone went far to negative the suspicion to which the first glance gave rise.

And now let us consider a few of the general principles, which have a bearing in passing on the question of the antiquity of engraved gems.

MATERIAL.—In the first place, remember that the harder and more precious stones were not used by ancient engravers: the diamond and the ruby perhaps never; the sapphire and emerald very rarely. As to the stones that were used, these chapters will indicate more fully, period by period.

SIZE.—In the second place, size is to be taken seriously into account, and here we must bear in mind that, with the exception of the earlier forms, scarabs, scaraboids etc. which were pierced, often for swivel rings and generally for suspension from wrist or neck, the stones were made for ring signets and could not be too large for that purpose. It should be noted, too, that many of the late Gnostic talismans and amulets were large and evidently not intended to be worn in rings. Very few ancient intaglios were used as ornaments. The exact opposite is true of the cameos, generally made for the ornamentation of clothes, armor or utensils; but the forgers down to the time of the Poniatowski sale do not seem to have realized either of these facts. To them a large surface offered better opportunities for groups of figures and they saw no reason against its use in the case of the intaglio. Thus most of the Poniatowski gems betray their falsity by their large size alone.

Conversely the ancient signet stones were apt to be relatively thicker than the modern imitations. The old rings were heavy and the gem-cutters, working by hand alone, had no occasion to cut the stones into the very thin slices made easy by our modern mechanical devices. This rule of course is much less universal than the one calling for a circumference not too large for a ring setting, and many thin stones, some of them cut down in modern times, are undoubtedly genuine. Still, the principle is worth remembering and applying.

SHAPE.—The ancients may be said to have abhorred angles, and most of their stones are oval or circular. Some few incline toward the square but these are not common and the angles are rarely, if ever, sharp. Octagonal shapes seem to occur only in gems that have been re-cut in mediæval or modern times, sometimes, probably, on the theory of the octagon's mystic significance as representing the ogdoad of Pythagoras, or on account of its Masonic vogue. The face of the stone was very often cut convex, and, especially in the cases of transparent and translucent stones, both sides, because the depth thus gained helped the cutting and added to the beauty of the intaglio. A few garnets with convex face and concave back are probably due to desired light effects. A convex back that meets a flat face is anathema among ancient stones. Also it must be remembered that slight irregularity of outline or back is a very favorable sign. Stones cut by hand often show this. Lathe-shaped stones are absolutely regular, and only a painstaking forger or one working on a sufficiently important piece to render it worth his while to take pains, bothers to do much hand shaping. Ignorant buyers and rich tourists do not demand it and why should he undertake unnecessary labor? Sometimes on the back of ancient gems, especially sards, are found two slight depressions or some remains of them. Their purpose is doubtful: perhaps to help fix the gem for engraving or in the ring. This peculiarity has never, to my knowledge, been imitated.

SURFACE APPEARANCE.—Naturally most ancient stones show some surface indications of their antiquity, depending of course on the wear and tear of use and on the exposure and vicissitudes of centuries. There is a dullness, occasional scratches and often a minute disintegration of the stone which the glass shows—an *even* wear on all equally exposed surfaces, which is distinctly different from the elaborate scratching of the forger, the action of powerful acids or the appearance presented by stones that have been crammed down a turkey's throat and subjected to the action of its gizzard—a not uncommon trick. Obviously gems found in some tomb where

they have been protected from the elements etc. may show little or no signs of the action of time, but the rule generally holds fairly well.

In this connection, however, must be considered the frequent practice of repolishing ancient gems, if only to clear from the surface the paste with which it was fastened into the ring bezel or the adhering particles of disintegrating metal. Naturally the backs of gems are apt to need and to show this more than the faces, for unless the finder or later owner be very ignorant, he will let the face alone, since a repolished face is not to be desired from an archæological standpoint. Usually too, the modern repolishing, done for the most part by mechanical means, is not forced deep enough to obliterate entirely the parallel lines of the old hand-polish—the “hog-back polish”, so called—which came from rubbing the stone back and forth on a polishing surface. Modern repolishing is sometimes indicated by slight friations at the edges of scratches, a fact which shows that, in fighting the forger, we must try to put ourselves in his place, just as a good general often pierces an enemy’s plans by imagining himself the opposing commander and reasoning out what he will do. So the forger in trying to indicate on his own fabrication the orderly events in the history of the gem will first polish, as did the maker, and then mar to show the wear of use and time. None but an honest, if misguided, repolisher who seeks, from his standpoint, to beautify his gem would try to obscure the marks of antiquity. The sequence of elaborate polish *after* scratching is a pretty sure indication of genuineness that none but a very analytical and subtle fabricator would reason out.

As to the polish of the intaglio itself, in the days when gem-collecting was a fashion this was held to be the surest test of the real antique, but most of the rules then in vogue have been pretty well exploded in the light of later knowledge. We know now that the ideas of the classic artists as to the polish to be given to the interior of the cutting were different at different times and in different places. Sometimes a high polish was given, sometimes little or none and, again, the

cutter essayed to polish only the larger interior surfaces. This much, however, may be ventured, that something must always be allowed to time, and a fine gem showing brilliant polish throughout the interior of the design must be always regarded with much more suspicion than one that shows no sign of ever having had any. However high the polish may have been at first, two thousand years or thereabouts is bound to bring a greater or less degree of dullness—in the words of Dr. King, “Like that produced by breathing upon the originally high lustre.” This appearance, he stated, it is impossible to imitate. Difficult to imitate would probably be better, for I doubt if any one detail cannot be imitated. At all events, the application of such a rule doubtless requires much more experience than most collectors gain. Dating the work after 300 B. C., lack of *any* interior polish is not a good sign. Among the late jaspers and crude Gnostic gems there is often little or none, but the Græco-Roman gem-cutter—even the poor one—seems to have exceeded our forgers in diligence, since one of these latter informed me regretfully that to polish the interior of an intaglio meant more labor than to cut it. Naturally it did not pay him to spend this labor on a cheap stone.

The probably not very frequent use of ancient stones for modern work should also be mentioned in this connection, as well as the occasional embellishment and re-cutting of ancient designs.

WORKMANSHIP.—From this I am convinced little or nothing is to be learned that will be of use to the average collector in identifying really clever imitations, except where the style of the work is incongruous with the material or the subject. The indications to be drawn from the use of the diamond point, enforced by many experts, are practically valueless. Assuming that you ever learn to distinguish the fine lines made by this instrument from those cut by delicate wheel-work—a matter upon which Furtwängler's speculations should make us diffident—there is always the question as to how generally the ancients used the “splinter of adamant” (probably not at all much before Pliny's time), and there is

the certainty that some moderns, at least, have used it. However the details of the appliances and tools used by ancients and moderns may have varied, the methods and means were too closely akin to show differences in the work that are consistent enough to have much value. Certainly none but a past expert can apply rules drawn from such differences to decide between a true antique and a clever attempt to imitate one.

It may be well, however, to mention King's dictum that flatness of a design, the whole of which is sunken more or less into the stone, is a not uncommon feature of archaic Greek gem-cutting, and an excellent criterion of antique origin.

DESIGN.—I now come to the province in which the forger is most likely to fail: the subject of the design, its method of presentation, and treatment. To be sure, he *may* copy literally an ancient gem, paste or coin and he *may* put it on the right stone of the right shape, but conceit, ignorance and carelessness all combine to lead him into some error that means detection. Besides, as a Roman gem-cutter has informed me, it is more difficult to copy literally than to work with a free hand, and experimenting in the line of having copies made has shown me not only that they charge more for such work, but also their practical inability today to accomplish it in the matter of detail. It is here that some knowledge of ancient art in general is necessary as well as of the subjects favored in each epoch and in each place, the way in which they were presented and treated, and the stones used. Thus equipped—and to so equip one's self is but pleasant study in lines of pretty general culture—you can go down into the market-place and bid a modest defiance to the foe. You know beyond reasonable doubt that the most perfect imitation of archaic Greek work cut on a blood-stone or a yellow jasper is a forgery because you know the blood-stone and yellow jasper were late materials in the glyptic art. You know, beyond reasonable doubt, that a Gnostic talismanic design cut on a chalcedony scaraboid or a scarab is false because you know that the scarab and scaraboid forms were not used when the

Gnostic philosophy flourished; and you know that an Etruscan inscription on a scarab carelessly cut and with an unornamented base, indicates that it is neither Etruscan nor Greek because the Etruscan always gave his greatest care to the elaborate cutting and ornamentation of the beetle. The Greeks cut their scarabs carelessly and they lack the base ornamentation. Such and many other incongruities serve but to suggest the endless pitfalls that yawn for the forger: his need to know enough to combine everything and combine it right, and it is a knowledge on such matters to which I trust a perusal of this work will help those who may feel an interest in the subject.

A few general principles that govern the ancient designs may, perhaps, fall naturally into this introduction, leaving the more specific characteristics of periods, schools, and fashions, for the following chapters.

In the first place, the subjects, while numerous, were distinctly limited. These will be best treated in the chapters under their epochs, while for the identification of the different deities and personages, which constitute a large proportion of the designs, I shall give in Part II a list of deities and heroes, the aspect under which they were represented, and the attributes one or more of which may accompany them. Certain gods and personifications such as Jupiter, Hermès, Venus Victrix, Victory and Fortuna are found very commonly, and many types vary so slightly in pose and attributes as to suggest famous statues as the basis of a conventionalized method of presentation on the gems. Historical scenes, as opposed to the mythological and those drawn from the epic cycles, are so rare as to arouse always the strongest suspicion.

By far the greatest number of ancient signets bore but a single figure; two and three appear much more rarely, and where many are shown it is nearly always late Roman work or, more frequently, modern. The chances of genuineness decrease in the ratio of the number of figures on a gem, except in the cases of certain subjects which will be treated under their proper epochs.

As for the composition, which down to the best Hellenic period was so drawn as to fill the entire field of the stone, remember, above all things, that the leading characteristics of ancient art were simplicity and restraint. Except on early Greek and on Etruscan gems you will find few forced attitudes or violent motions. Repose, soberness, statuesque pose, and lack of what may be called dramatic invention mark the best Greek styles and their successor the Græco-Roman. Whatever they represented was shown literally and with simple dignity. Nothing fanciful was allowed to intrude, for a large proportion of the subjects embodied, whether religious or from the epic cycles, were, in a sense, scriptural to both makers and wearers. When we compare the classic work with the dramatic poses, the pronounced action, and the figurative embellishments of the Renaissance and with later attempts to imitate ancient art in representations of ancient subjects, the difference is most striking; and, again, the Poniatowski gems marked its extreme (Pl. XXXII, 20). With the fewest exceptions it has seemed almost impossible for modern workmen to understand this and to restrain their eagerness to present what they consider a good picture. Once grounded on a little comparative examination, you will find your sense developing with more or less rapidity until you will *feel*, at first glance, the falsity of many pretended antiques.

In one field, however, the would-be imitators have been unable to follow out their self-convicting tendencies. To be sure, they cannot very well do so in the case of attributes and symbols alone, but these have never been popular with them or their customers. They were common among the ancients because of their luck-bringing powers, but their attraction for modern buyers, other than students, is far less than that of figures and heads. Heads, then, portrait or otherwise, are the subjects where the most marked difference between ancient and modern work fails us as a guide, and, by a natural evolution, heads have proved the most popular and the most dangerous fabrications through all the age of forgery. The number of portraits, for which the imperial coinage furnished the best of

models, are many and, together with those of deities and the purely ideal heads, they flooded the market of the eighteenth and early nineteenth centuries to such an extent that I would advise him whose interest and knowledge are in the early stage to buy few if any. Later he will come to know one, here and there, as a true product of ancient art. Until then, if he buys at all, let him frankly admit that he buys for experience.

It may also be suggested that the average forger was influenced in his choice of subjects by his conception of what would be readily understood by and pleasing to his patrons. Therefore, besides portraits and other heads, we find these gentry favoring subjects from the Erotic cycle; Cupid, under his later form of a mischievous child with wings and engaged in various and often fantastic occupations, Venus in her nude or semi-nude aspects and many of the more grossly Erotic representations. These examples will serve to exemplify my point. On the other hand, few forgers have attempted or will attempt sacerdotal subjects or anything that does not carry a clear meaning to the greatest number of possible buyers. The general public is and must always be their natural prey. The real students are fewer, generally poorer, and more difficult to deceive, and the subjects that appeal most to these are the ones where the pitfalls gape everywhere for the fabricator. The more clever he be the more surely will he follow the line of least resistance toward the field of his richest harvest.

SIGNATURES.—In the matter of artists' signatures we find a remarkable example of an upset in the forger's craft. During the most flourishing period of his cycle, the presence of the name of some supposed artist of antiquity on a gem was supposed to add both to its claim for genuineness and to its value. Now we know that this is one of the best evidences of fraud. There *are* signed gems, but they are very rare, and the artist's name is sometimes followed by the word, ἐποίησεν, is apt to be unobtrusive, and is found only on the larger intaglios or on work of a high class. Ordinarily inscriptions on stones, except where they are mottoes or, as in the case of Etruscan scarabs, where they describe the subject, indicate the owner's name, usually

abbreviated or often in the genitive case. It seems strange that it was not realized a hundred years ago that another man's name was the last thing an owner would want on his signet. It is to be accounted for in the comparatively few instances where it is evidently authentic, by the desire of the owner to show a signed specimen of the work of some artist of high repute, and the fact is often indicated by the *ἐποίησε*. The unobtrusiveness of the name itself, while it may argue for a signature, is by no means conclusive.

INSCRIPTIONS.—Generally speaking, the attempt to increase the value of a forgery by adding an inscription of any kind is very apt to lead to detection. As a rule, and especially in signets, these are reversed on the gem so as to read right in the impression. Still, there are many exceptions to this, and on stones intended primarily for talismans and amulets we may say there is no rule. It is by some blunder in an inscription that the forger often gives the clue for his own detection: a style of lettering incongruous with the period of the gem as otherwise indicated, improbable subject matter of the inscription, such as descriptive legends on pretty much anything but Etruscan scarabs and very late work, or yet some other inconsistency.

Of course considerable knowledge is necessary in order to apply this test. The ancients were fond of abbreviations and elisions, and they often reversed a letter, so that in some cases, what the modern would call the most careful correctness is, in itself, the basis of suspicion. It is surprising, however, how quickly one can familiarize oneself with much that, at first glance, seems well-nigh hopelessly involved. Knowledge on one point flashes illumination on another, and inspires the seeker with an ardor than which no pleasure is greater or more profitable.

PART I

HISTORY OF GEM ENGRAVING—CHARACTERISTICS
AND DEVELOPMENTS OF EACH PERIOD



CHAPTER I

EARLY WORK.—MINOAN AND MYCENÆAN GEMS.—
THE GREEK MIDDLE AGES.—MELIAN OR ISLAND
STONES.—FROM 3000 (?) TO 600 B. C.

MINOAN GEMS

THE earliest gems which, from their character and place of discovery at least, may be called Greek have been found in Crete. "Ægean", "Minoan", "Mycenæan" are words that have hardly, as yet, passed beyond the stage of tentative usage, but perhaps the most promising characterisations of the civilisations in these regions from, say, 3,000 to 900 B. C. (circa) is to call that of Crete, Minoan, that of the mainland, Mycenæan, and the whole, Ægean.

Whatever may have been the ethnic relationship of this race or these kindred races with the Hellenes of history, the spirit that inspired their civilization and its resultant art was one and the same, and its development, despite the so-called "dark ages" that fall between the periods, was, in a measure, consecutive. It evidenced a motive force definitely foreign to that which dominated the Orientals and the Egyptians; it was an art that revolted at the very beginning from the conventional and religious trammels that have always hampered that of the East; it exhaled the breath of individualism and freedom—a freshness, a buoyancy, the joy in life for its own sake—however defective the craftsmanship that strove to express these things. That there were communication and reciprocal influences between Greece and the islands on the one hand and Asia and Africa on the other is undoubted, but the progressiveness of the West and the conservatism of the East forbade that either

should be copyists. All this is told on the gems with a clearness and certainty that strike the keynote of the story of these far distant ages.

When we come to fix a date for our earliest Cretan intaglios it must be recognized as highly speculative. A few centuries then mean little as yet to the wisest theorists, and they themselves recognize, in the light of many past overthrows, that the data tomorrow discloses may negative the conclusions of today. Speculatively, however, and giving due consideration to present knowledge and present deductions, let us place the birth of Minoan and Ægean gem-cutting at about 3000 B. C. It may be earlier, but let it go at that.

Naturally the first gems were the softer and more easily worked stones and it may be that the large deposits of different colored steatites that have been found in Crete explain her precedence over the Greek mainland in the art. Such stones could be worked by hand-drills, without the aid of the wheel and of the more finished tools, and it is probable that the harder gems were not cut before the end of the third millennium, perhaps later. Furtwängler has maintained in his *Die Antiken Gemmen* that the Mycenæan stones were not used for signets, but only as talismans, amulets and ornaments. The recent discovery, however, made by Mr. D. G. Hogarth at Zacro, in Crete, of hundreds of clay sealings (See *Journal of Hellenic Studies*, Vol. XXII) shows that at least the Minoan gems of an early period were signets as well. In the light of this testimony one can hardly accept Furtwängler's limitation of uses of the mainland gems of a later date.

Considering now the Cretan stones, we find a variety of shapes. The earliest seem to have been, in the main, rather short triangular prisms of soft stone, bearing more or less rude pictographic symbols on each of the three sides (Fig. 1; Pl. I, 7). The designs were often surrounded by elliptical grooves in the form of cartouches and the stones were pierced lengthwise. Single human figures or, at



Fig. 1.

most, groups of two or three in various attitudes and employments, birds, animals, vases and other objects are found on these but no linear symbols. The subjects were treated more pictorially and were less conventionalized than those of later date. Often the human figure shown on one side seems to represent the owner and his employment, as that of shepherd. Monsters are also found, such as a lion-headed demon which perhaps represents some semi-divine protector or mythical ancestor of the owner. Groups of dots occur on some stones, perhaps with the idea of filling up the field, as was often done with a feather design or some other ornamental motive or, in many cases, as Evans maintains, these dots may have a commercial significance and be part of a numerical system. In his *Scripta Minoa* he has established pretty clearly his claim that the Cretan gems show a definite development of the symbolic idea through pictographs and hieroglyphics systematized about 2800-2200 B. C., and gradually conventionalized toward 2000 B. C., into linear characters. Together with this development on the one side there was naturally, on the other, the growth of purely art ideals, until, finally, the two ideas were disassociated and what was picture-writing became the picture or the writing, as the case might be.

Later, the tendency as to shape was to elongate the triangular prism form (Fig. 2). The stones were still soft ones,



Fig. 2.

steatite, serpentine, etc., either with or without the cartouche groove. Both hieroglyphic and linear symbols were then used and one or more sides of the prism were often occupied by purely decorative motives, some-

times apparently derived from those on the Egyptian scarabs of the 12th dynasty.

Finally, and at a period co-æval with the best Mycenæan gems of the mainland, we find the elongated triangular prism worked in the harder stones: jasper, carnelian, chalcedony, crystal, amethyst, and hematite, often with the cartouche and

the perforated ends surrounded by a triangular groove. On these are hieroglyphics in their most conventionalized forms.

Quadrangular prisms now occur (Pl. I, 1), sometimes with the four sides equilateral, and, also, other shapes, including the

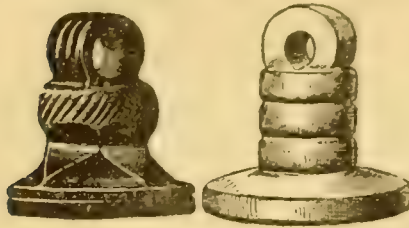


Fig. 3.

Mycenæan lenticulars (Pl. I, 3, 5, 8, 9, 10) often with designs on both sides, glandular stones (Pl. I, 2, 11) and other mainland forms, and, more rarely, gems identical in shape with modern watch-charm seals (Fig. 3), with

variously fashioned tops or handles, elaborately worked and with the design cut on the base. There is one, an agate, somewhat in the form of a scaraboid, the relief side of which is worked with a convoluted design (Fig. 4), and a unique, heart-shaped amethyst with a flying eagle and other characters, figured by Evans in his first article.



Fig. 4.



Fig. 5.

Probably co-æval with the shorter triangular stones are, also, many button-shaped seals (Fig. 5) bored through the top and bearing often 12th dynasty scarab decorative motives, and, much more rarely, truncated cones that may have been derived at an early date from northern Syria. All are pierced for suspension from the wrist or neck of the owner.

In considering the different shapes it will be well to bear in mind that hard and fast rules are difficult to frame in view of the present state of knowledge, if, indeed, such rules can ever be justified. It is largely a matter of apparent tendencies, and forms other than those yet noted probably exist. At a time when cutting the stones was difficult, it is easy to imagine that

the original lines of a carnelian or chalcedony pebble may have had a good deal to do with the shape of the finished gem.

As for the subjects engraved on the Cretan gems there is found considerable variety and, at the same time, a constant repetition of many devices developing from the pictographic to the conventionalized and linear and seeming to indicate clearly their significance as characters of a written language. Such symbols as human eyes (Pl. I, 1b), a bent leg (Pl. I, 1c), St. Andrew's crosses with balls at the end of each arm (Pl. I, 1a, 1d), broad arrows, a head pictured instead of the animal to which it belongs, a spray for a plant, and indications of a gesture-language, like a bent arm, the hand with open palm, and crossed arms with the thumbs bent back, recur constantly. Of other but perhaps somewhat cognate designs are a wolf's head with protruding tongue, a dove preening its wing, a ship with two crescents above (Pl. I, 1a), a pig standing before a door, a fish (Pl. I, 6c), implements (Pl. I, 1d) and a harp, some of which, in all probability, indicate the callings of the owners.

Also there are animals (Pl. I, 2, 3, 4a, 6c, 7a, 7c, 10); deer, wolves (or dogs), goats, lions, bulls, tortoises, four owls grouped around a stellar disc with twelve rays, a cow suckling calf, a she-goat and kid, birds, a duck standing, a flying dove, scorpions, crabs, fish, shells, and the spider, common here but unknown on Mycenæan gems. Often the animal's head is turned back (Pl. I, 3). Of these designs many are rudely cut while others are naturalistic and spirited. Vegetable forms, like flowers and trees, and motives drawn from them are common (Pl. I, 1c, 9), and an eagle with zig-zag lines in the field doubtless expresses the idea of the thunder-bird. The last occurs on a late gem. On one are four vases; on another a solar (or stellar) disk with revolving rays. The charioteer driving two horses (Pl. I, 11) represents the best period of Minoan work. Many show hunting scenes and animals attacking their prey or two or more men in active groups (Pl. I, 8), sometimes, apparently, fighting or engaged in some sport. Often the work is so rude that it is not easy to specify the subject (Pl. I, 4, 7). The human figures are apt to be what we would call wasp-waisted

(Pl. I, 2, 8, 11), and the female ones often wear bell-like skirts (Pl. I, 6b). Among the miscellaneous devices are shields, lotos flowers, labyrinth schemes, decorative patterns, often evolved from the spiral, as on Egyptian scarabs, a canopy with four forked supports, and five towers standing on a hill.

Monster types (Pl. I, 7b, 9) are very common and were, doubtless, held to be luck-bringing. Among them are a human figure with bull's head, a man-stag, a man-boar, an eagle-woman in variant forms, grading down to mere symbolic representations, a winged sphinx, a Pégasos (or hippokamp), a double-headed dog with a single wing rising between the heads, lion-headed figures with human arms and birds' bodies, birds' heads with lion masks, and, also, many bird masks and bull masks. These mask types tend constantly to develop into mere conventional representations of the idea. There is a sphinx with a cap and butterfly wings, a grotesque human bust set in a butterfly's (or bat's) wing, the rear view of a squatting griffin-like monster with butterfly wings, a monster with human head, lion's legs and wings covering the body, winged human figures, and even a pair of raised arms with an antler between for a head. These examples will give a fair idea of the scope of the Cretan representations. Not infrequently is shown a heraldic tendency toward balanced groupings, such as a pedestal with lions regardant on either side (Pl. I, 3). The wings with which many of the monsters are equipped are of several types. That of the hawk or eagle is much the commonest and there is also the butterfly (or bat) type and the purely decorative, curving forward or like a spiral. Both the idea of heraldic grouping and the wing tips curving forward show a distinct oriental influence.

Cult or sacerdotal pictures representing worship are also found. An armed goddess with a lion is probably of this character, as is, also, the goddess with the bow (Pl. I, 5). In the field of many gems, along with the pictorial design, are what seem to be purely linear symbols (Pl. I, 1, 2). The swastika is cut in the field of several and, more rarely, the cross. The latter, doubtless, was suggested by some Egyptian type. It is

difficult to place even approximate dates of many pictures, especially those of which only the impressions were found and where we have not the material as a guide, while mere merit of the cutting is not a safe criterion, since here, as later and everywhere at the best periods of each art development, there must always have been many poor workmen who cut cheap stones cheaply for poorer patrons. When, however, the idea of the composition is ambitious it is fair to assume we are not far from some cultured epoch, as in the cases of a man in a boat repelling a sea monster, a pugilist before a column and a scene which looks as if it might have been taken from a bull ring.

It seems probable that the best period of Minoan art was somewhere around 1800 to 1600 B. C. This civilization apparently closes about 1200 B. C.

MYCENÆAN GEMS

Turning now from the island thalassocracy of Crete to the mainland of Greece; from Minoan civilization to Mycenæan, but all of kindred type and Ægean, we find a somewhat similar development and collapse: a civilization of a high order running from somewhere in the early part of the third millennium to 1200 B. C., according to Dr. Furtwängler, and extended by other investigators down to 1000 B. C. or even several centuries later. One reason, perhaps, for the uncertainty of these dates lies in the fact that the invasion of the Northern races, probably a kindred but more barbaric stock, was rather in the nature of a gradual migration, and the so-called cataclasm was really a series of cataclasms resulting in a decay that reached its climax in ultimate barbaric ascendancy. Furtwängler puts the best period of Mycenæan art at from 1600 to 1400 B. C., a date that we might fairly extend somewhat earlier in view of the Cretan revelations.

Considering the purely Mycenæan gems, these, like the Cretan, were first soft stones, usually steatite, three-sided with approximately right-angled sides, cut and bored by hand and bearing rough, primitive designs of men, animals, vases, ornaments and characters.

In the best periods we find the purely art element predominating and the characters less used. Soft stones, cut by hand with the drill and graving tool, were still used for ordinary work, but intaglios of a high class were engraved with the wheel on carnelian, chalcedony, banded agate and sardonyx cut both parallel with and across the layers. Amethyst and rock-crystal are not rare, and hematite, porphyry, serpentine and jasper are also found. Glass pastes were, at least, known during the late Mycenæan Epoch.

The form of the later stones was usually that of a flat disc or lens (Fig. 6) always bored through. Less common



Fig. 6.



Fig. 7.

shapes were, the so-called glandular (Fig. 7), and, rarer still, those shown in Figs. 8, 9, and 10.

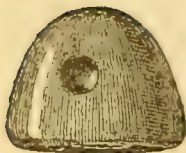


Fig. 8.



Fig. 9.



Fig. 10.

The character of the work on the harder stones is often of a high order. The makers lacked the patience to elaborate details such as the Asiatic craftsmen delighted in, but they were artists to a degree to which the others never attained.

Freshness, liveliness, naturalness, enthusiasm, originality and imagination, often verging upon the fantastic, characterized their work. They had a penchant for movement and violent action, though the execution tended to stiffness and constraint despite the freedom of idea. Muscles and women's breasts and hips were accentuated and the hair was freely handled. Clothes gave the form of the body, but folds and the skeleton within the form were beyond them as were perspective and foreshortening. Above all, they did not borrow or copy. Decoration was worked out to some extent and a controlling motive was to fill the whole picture surface of the stone, even at a sacrifice of pose and grace. Through it all run the signs of a powerful folk-lore.

The subjects are, in the main, similar to those on the Minoan seals. Animals predominate: lions, bulls, goats, boars, pigs and deer, with their heads and legs frequently much distorted so as to fill the space (Pl. II, 2, 3, 4, 5, 7, 8, 9, 11, 13, 14, 16, 17, 18, 19, 20, 21). Sometimes these were grouped heraldically (Pl. II, 14), often back to back with heads regardant, and a column, an altar or the sacred tree of the East between. More rare is such a fantastic grouping as is shown on a gem on which the bodies of three animals are provided with but one head. Often one beast is attacking another. Also many birds are found, fishes (Pl. II, 10), especially dolphins, and trees. Much more rarely only the head of an animal was pictured. Of inanimate subjects there are ships, vases, buildings and geometric decorations, and one gem seems to show a thicket or wood (Pl. II, 6).

Turning to the human types, these are, for the most part, worked into representations of combats (Pl. II, 15), chariots (see Pl. I, 11), hunting (Pl. II, 4), ceremonial dances, sacrificial scenes (Pl. II, 9) and sacerdotal worship. The men are apt to be slender waisted as on the Cretan gems (Pl. II, 10, 15), and the women usually wear the same bell-like skirts (Pl. II, 12). There is a suggestion in the prominence often given to female figures that the position of women in the Mycenæan age was not low.

The cult element was in evidence in this art. Of divine types we find representations of both gods and heroes (Pl. II, 1). *Arēs* is shown armed with a spear and, also, a goddess dressed in long robes, holding, sometimes, a bow and, sometimes, poppy-heads or a mirror. The reflection in the mirror may carry the suggestion of the spirit idea. She is accompanied by a swan or a ram, the figure and attributes denoting some combination of the *Artemis* and *Aphroditē* cults (Pl. II, 12).

Demonic monsters of mixed forms (Pl. II, 1) are frequent, as on the Cretan stones. These are usually human to the waist and have wings and animals' heads. The man-bull and man-lion were most favored; also the sphinx and griffin types are found with varied developments (Pl. II, 2, 11, 16).

Before closing this description of the Mycenæan gems, I must quote a disquieting paragraph from a letter written to me by Dr. Furtwängler and dated April 10, 1907. He writes:

"A very dangerous kind of forgeries comes in the last years from Athens, very clever imitations of Mycenæan and Archaic Greek gems, sometimes, even, with inscriptions." (This probably refers to the latter class, as a Mycenæan gem with an inscription other than pictographic or hieroglyphic would expose itself promptly). "One must be very cautious against these things. The forgeries betray themselves by mistakes in the forms of the stones and by the quality of the material, and, of course, in the style; but great experience is needed to guard against them."

GREEK MIDDLE AGES

With the decay of Mycenæan culture came what are called the Dark Ages in Greece which extend down into the seventh century B. C. The work on hard stones was no longer possible. Only soft and opaque material that could be cut without use of the wheel seems to have been available. Probably little of this was done in Greece itself, since Oriental forms, unusual or not found in the Mycenæan Epoch, now appear; not, it is true, the cylinders, but flat stones with a



Fig. 11.



Fig. 12.



Fig. 13.

bored handle (Fig. 11), rough cone shapes (Fig. 12) grading down to the flattened hemisphere (Fig. 13), from which it is possible that the shape called the scaraboid, so important at a later period, was developed. Some few gems that can be called scaraboids (Fig. 14) are found even now. At first circular forms of the engraved field prevailed and, afterward, elliptical. There, too, were variant disc shapes (Figs. 15, 16,



Fig. 14.



Fig. 15.



Fig. 16.



Fig. 17.

and 17) and approximately truncated cones engraved, usually, on both sides, while the flattened parallelopipedon, usually pierced, was borrowed from the Egyptians and engraved on one, two, four or all six surfaces. More rarely the top is beveled off, making a smaller picture surface above. We find, also, imitations of Egyptian scarabs, both as to form and technique, in blue Egyptian pottery, glass and soft stones, with, occasionally, some other figure substituted for the beetle relief. Scarabs, too, were imported from Egypt and Phœnicia in considerable numbers.

There was a distinct limitation of subjects in this period. No demonic figures appear, though Pl. III, 1b seems to be an exception. Generally we find only very rudely drawn men (Pl. III, 2, 6, 8), a few European animals (Pl. III, 1a, 2, 3, 5b, 6, 7) and various geometric decorative designs (Pl. III, 4, 5a). Through it all there seems to be a rising Oriental influence shown by the frequent occurrence of the tree of life (Pl. III, 7) and of wings with the tips bent forward as in the Melian gems (Pl. III, 10, 11).

MELIAN STONES

Toward the end of the epoch, in the seventh century B. C., the Ionic Greeks began to take the lead, as indicated by the triumph of the Oriental ideals, though the earlier lessons of exactness still controlled and regulated a new and growing Greek art, original and yet receptive of foreign ideas.

At this time there is definite evidence at Melos and, to a less degree, at other points, of a recrudescence of Mycenæan forms. These gems are known as "Island stones" or "Melian stones" from their principal place of discovery, and seem to have had only a local meaning. Perhaps they should be placed in the next chapter, as being more akin to Archaic Greek art than to Mycenæan, but it seems more orderly to clear away here all the early and mixed developments.

Very few of these gems were engraved by the wheel or on hard, translucent stones. Most of them are crudely executed hand-work on steatite and other soft materials.

The shapes are for the great part Mycenæan; lenticular and glandular, beside which are found some of the Cretan forms, three sided prisms, conical and hemispherical stones, one of these last being engraved on the convex side. There are also a few cylinders, scarabs are more common and we have somewhat more frequent examples of the scaraboid.

The style of the pictures, however, is nearer to that of the Archaic Greek, though the twistings and contortions of the bodies, popular in the earlier epoch, were frankly, usually badly, imitated (Pl. III, 12). The work lacks the imaginative freshness and the naturalism of that on the Mycenæan gems.

Among the subjects, animals were most popular; a small number of conventional types being constantly repeated. The front legs are generally raised, as if for jumping or galloping (Pl. III, 11, 12, 15, 16); the hind legs are usually together, when often only the nearer one is represented (Pl. III, 15, 16). A favorite pose was the regardant (Pl. III, 14, 15, 16), but more conventional and stiff than in the Mycenæan types. Sometimes they showed only the front half of the body or

two front halves symmetrically arranged (See Pl. III, 1a). Hair and feathers were indicated by parallel lines and there was often considerable ornamentation with little borings (Pl. III, 12, 14), arrow-feather motives (Pl. III, 11, 12) and, more rarely, rosettes, lotos leaves, palms, etc. The favorite animals were goats (Pl. III, 12, 15), lions, deer, oxen, boars (Pl. III, 13), water-birds, lizards and fishes, especially the cuttle-fish. Sea-monsters (Pl. III, 9, 10) and winged animals were often shown and the wings are usually bent forward under a decorative impulse that, beginning even in Cretan art, pertained through the Archaic Greek period (Pl. III, 10, 11, 16). The sphinx and griffin (Pl. III, 16) were favorites and the Chimaira (Pl. III, 14) appeared for the first time. Dragons also were pictured and, later, winged horses (Pl. III, 11), goats with fishes' tails, winged man-demons, often with fish combinations, snake-demons, gorgōns and the centaur borrowed from the East. Otherwise the Mycenæan demonic types are lacking. Mythological subjects, too, were represented, such as Hēraklēs fighting with what seems to be a sea-demon, the hero being shown naked and with a quiver (Pl. III, 9), and Promētheus, chained to his rock, preyed on by the eagle. A prone figure attacked by a large bird (Pl. III, 17a) may be either Promētheus or Tityos, though, if it be the latter, as Furtwängler suggests, it is rather surprising that only one vulture is shown. Perseus and Medousa are also found.

Naturally there were many purely human figures and scenes, such as a charioteer driving four horses, and the engravers even succeeded, though rather rudely, in picturing emotions, such as rage or sorrow. Inanimate objects, like trees, ships and vases, were rare.

With this summary we may close the story of the early gems and take up the consecutive development of purely Greek art.

CHAPTER II

ARCHAIC GREEK GEMS

FROM the seventh to the sixth century the use of the seal in Greece increased, so that we find in Diogenēs Laertius an account of one of Solōn's laws which forbade a gem-cutter to retain a copy of any seal he had made.

Under the heading of "Archaic Greek" we shall consider the gems of from 600 to about 480 B. C., a period within which the art of gem-cutting developed through archaism into the best that the world has ever produced. It may be divided into two epochs: the purely archaic from 600 to 500 B. C., and the transition epoch from 500 B. C. to about 480. The so-called "Best Period", running on to the end of the century, has been treated by some writers with these, but I prefer to consider it in the next chapter.

During the earlier part of the transition epoch there still remained some measure of archaic stiffness which gradually disappeared, and we find, at last, the greatest breadth of conception together with the perfect freedom of execution which marks the summit of the art.

In the sixth century the prevailing form was the scarab, derived from earlier Egyptian importations, but the scaraboid



Fig. 18.

was not uncommon, varying in shape from Fig. 14 to Fig. 18. Since, for the Greeks, the scarab held no religious significance but represented to them merely a decorative motive, as the art of the intaglio advanced, the back of the gem became less important and it was found much easier to round it off. The suggestion from the flattened cone forms was obvious, and the scaraboid seems a perfectly natural development on several lines. Incidentally the older Mycenæan forms disappear.

MATERIALS.—Now are found the beautiful hard stones cut by the wheel—materials and methods little known in Egypt. The soft stones engraved by hand gradually fall into disuse except a clear, greenish steatite quite common among the Melian gems of the seventh century and, also, though more rarely, black steatite. Glass pastes, too, appear occasionally, especially a dark blue glass, perhaps intended to imitate lapis lazuli, also a green and, toward the end of the period, a white.

The characteristic substances, however, were the transparent quartzes; carnelian, chalcedony, banded agate and sardonyx cut across the layers, except where, as in the case of eye-agates, the appearance of the stone suggested something mystical. Less commonly are found green jasper and rock crystal. Plasma and hematite are very rare and, later, drop out almost entirely. Amethyst does not seem to have been used at all.

The scarabs of this period are generally quite small and are marked by a lively and faithful rendering of the beetle relief, not however elaborately worked out in detail as were the Etruscan and lacking the Etruscan ornamentation around the base. Furtwängler distinguishes a certain cheap class of scarabs and scaraboids as Peloponnesian. The scaraboids throughout the entire period were often much larger than the scarabs, and in the fifth century they become the prevailing form—among the Ionic group almost the exclusive one, though in Greece proper and Magna Græcia the scarab was still popular. Sometimes there is substituted for the beetle an animal's head or a whole animal, a mask, a seirên or a human figure in some attitude. Rarely there were hemispherical and disc shaped gems, and ring-stones with the engraved surface convex began to appear toward the end of the period, as we shall note more particularly in the next chapter.

A characteristic of Archaic ideas was the filling of the entire field of the picture surface, an end often attained by sacrificing a more natural attitude to one that is stiff and forced, though to no such extent as in earlier periods. The design was always surrounded by a border, generally a milled

border of oblique strokes, sometimes one of dots and very rarely a dot and line (Fig. 19; See Pl. VIII, 1). Occasionally Greek scarab designs are surrounded by a simple line like the Phœnician, but not uncommonly we find the border worked

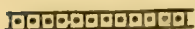


Fig. 19.

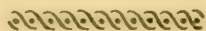


Fig. 20.



Fig. 21.

out with more elaborate richness such as Fig. 20 (See, also, Pl. IV, 2) or Fig. 21. The picture, while generally adapted to the border, often had a line to stand on as in the Phœnician scarabs and sometimes, especially among the Eastern Greeks, the space below was filled with crossed lines or, more rarely, with some definite design like a lotos flower or an animal mask (Pl. V, 19).

TECHNIQUE.—The interior of the engraving on the old Archaic stones was generally not polished, even in the most carefully worked out examples. Later we find a faint polish, but only at the end of the epoch appears, occasionally, a complete polish of the picture which is characteristic of the best stones. Details of anatomy were avoided at first. The artists were enough of artists to be cautious and confine themselves within the limits of their powers. The naked figure of the early Archaic style is characteristic in its tendency to represent the straight stomach muscles between breast and navel by three or more rolls (Pl. IV, 4; V, 1, 15, 16) while in the developed and later style there are but two as in nature. As early as 500 B. C., the beginning of the transition period, the artists seem to have understood the human body fully. All the lines and muscles are portrayed accurately, if often rudely: the *linea alba* running down from the navel and the muscles of legs, side and back, as in the figures of the Aigina pediments. The early Archaic style indicates clothing by a few rough parallel lines (Pl. IV, 6; V, 4), the later, by fine folds (Pl. V, 2, 7, 17). In the old style, hair and beard are done with parallel strokes (Pl. IV, 1, 16, 24; V, 4, 23) and, rarely, by a series of little drill holes like strings of beads (Pl. IV, 12; V, 1, 15). In the later Archaic work the hair and beard are shown carefully curled (Pl. IV, 17, 21).

A characteristic of the older gems is the lack of variety—almost uniformity—of subject and motive. These are repeated again and again with slight variations, often as if by the same hand. Kneeling figures (Pl. IV, 2, 12, 17, 19, 24; V, 4, 6, 8, 15, 20, 23), occasionally between two animals heraldically arranged, and figures running with the bent knee action were popular (Pl. IV, 23), probably because they filled out the space more easily, and the upper part of kneeling figures was represented first in profile and, later, facing out. Still, there was little of the frank distortion, especially of animal forms, which the Mycenæan and Melian artists had relied on as space-filling devices.

By 500 B. C. the subjects and representations of motion show more variety, and the kneeling motive, though still used, is handled with more power and spirit. Figures are sometimes drawn bearing the weight on one leg, the front of which shows, with the other slightly bent and in profile. Later both legs are shown facing. Many of the figures bend and turn, and the artists showed a distinct preference for front or back views of the body.

SUBJECTS.—There are but few representations of the principal deities on these gems. Apollō appears with lyre (Pl. V, 15) or stag and the Hyacinthine Apollō holding a flower, as on the coins of Tarentum (Pl. IV, 24). Rarely he has his earlier attributes, the sceptre and sparrow-hawk, and on one gem he is mounted on a swan and holding out a branch. Artemis, with or without wings, as a protectress of animals, is found in the early Archaic period (Pl. IV, 6). Hermēs, the messenger and the god of trade, was common, sometimes in a long tunic (Pl. V, 17) but generally naked save for his short mantle (Pl. IV, 17). His hat, usually the broad-brimmed petasos, but in some cases a pointed Eastern cap, is sometimes winged, sometimes not, as is the case with his feet. His hair is long on the earlier, short on the later gems, and he is unbearded. Athēna also appears, sometimes winged, and the allied cults of Hermēs and Aphroditē, from which sprang the Hermaphrodite idea, may possibly be represented in a gem

bearing a two-faced head, male and female. A national type is shown in the Athenian gem bearing the head of Athēna and an owl.

Of the heroes, Hēraklēs is by far the most usual. Often he is kneeling, running or holding a bow or a club. Less frequently he is shown walking with bow held out and club raised (Pl. V, 3, 24). Of his labors appear the contest with the Nemean lion (Pl. V, 10, 20) or the Lernean hydra or water dragon, carrying away the tripod, fighting Achelōos (Pl. IV, 7), Kerberos (Cerberus) (Pl. V, 9) or a sea-demon or leading a horse, perhaps one of those of Diomēdēs (Pl. IV, 5). At the beginning of the fifth century he is sometimes pictured beside a spring, binding his sandal (Pl. IV, 25) or in some statuesque pose. Early Ionic art preferred the beardless face, and his frequent appearance unbearded shows Ionic dominance in the gem-engraver's art. Other hero sagas play a small part. Kastōr and Polydeukēs (Pollux), Thēseus, Ariadnē, the Minōtaur, Odysseus escaping under the ram from the cave of Polyphēmos, Tityos pierced by the arrow (Pl. IV, 2), Aias (Ajax) carrying the dead Achilleus, or Menelaos, that of Patroklos (Pl. V, 8), and Eurōpē and the bull (Pl. IV, 8?), are rare examples.

The cycle of demons and lower gods is more fully represented. There is a demon the upper part of whose body is that of a lion (Pl. IV, 15), apparently some destructive or death-dealing power, which shows Mycenæan influence or, perhaps, Eastern. Also there are bull-headed demons with or without wings (Pl. V, 6), a double bull-headed demon holding two serpents, a demon with an ass's head, a winged demon with a rooster's tail instead of legs, probably a spirit of lewdness, and a winged demon wearing a cuirass who is running and holding two snakes, doubtless a demon of fear. The Gorgōn is found as a controller of animals (Pl. V, 10), and winged horse-bodied demons with Gorgōn faces (Pl. V, 22) may be drawn from the legend of the amours of the wind-god, Zephyros, under the form of a horse, with the harpies. It does not seem to me that Furtwängler's identification of the winged Seilēnos demon that has a lion's hind quarters joined to him,

centaur-like, (Pl. V, 12) with the Phœnician god, Besa, is well established or that the Seilēnos-centaur fighting a lion has a kindred meaning, though there is, doubtless, Phœnician influence shown in gems of these types. The centaur with human forelegs carrying off a nymph is purely Ionic (Pl. V, 4). Medousa appears often (Pl. V, 10), once as a Medousa-centaur (Pl. V, 22), and Seilēnos was a great favorite as a luck-bringing demon (Pl. IV, 1; V, 1, 23). Hence the faces on these monsters are often of the Seilēnos type, broad, bearded and with horses' ears (Pl. V, 4, 12). Sometimes he has a tail, sometimes hoofs, and a rooster, as an emblem of lewdness, is occasionally figured along with his other attributes. Pictures of him carrying off a nymph suggest the same idea. On one gem he drives a chariot to which lions are yoked. Seirēns are shown, often with human arms in addition to their wings, as in the Ionic type (Pl. V, 5). These, sometimes, hold a mirror and are adorned with a necklace or a hood. The winged Nikē bears a wreath, a bough or a flower (Pl. V, 7). Sometimes she has winged feet and there are pictures that seem rather to suggest some sort of demonic offshoot of the Nikē type. The flying type of Erōs was popular in the first half of the fifth century and on one gem which is in the Metropolitan Museum, New York, he is probably shown carrying a maiden with a lyre (Pl. V, 21). It would be interesting to fancy such a gem the seal of Sapphō or some sister poetess. Demonic animal types were also favored. The Sphinx, emblem of wisdom and power, is common (Pl. IV, 16; V, 14) and the griffin less so. Each is sometimes shown with a victim. The winged lion and winged bull were taken from Persian art and the winged sow is found. Besides Tritōns (Pl. V, 18) and hippokamps, there are also winged sea-monsters and all sorts of animal forms fantastically mixed, not unlike the symplegmata or grylli popular at a much later period in Rome. Sometimes these are posed in a sort of heraldic arrangement.

Natural animal forms were common subjects: lions (Pl. IV, 3a), boars, sows, rams, bulls, bucks (Pl. V, 13), eagles (Pl. V, 13?), roosters, horses, a cow with a calf (Pl. IV, 10), and a

lion tearing a boar, bull or deer are all found (Pl. IV, 13, 22; V, 25). The dung-beetle is pictured and may have been supposed to have some healing efficacy.

Human figures having no special significance were popular. As I have said, these are often kneeling (Pl. IV, 12). Sometimes they carry objects: flowers, beakers, vases or animals, perhaps as offerings. Sometimes they are archers (Pl. IV, 20), sometimes warriors with spear and shield (Pl. IV, 4, 23) or in chariots, shown either full front (Pl. IV, 3b) or in profile (Pl. V, 11). Toward the end of the period youthful warriors are very common, often bending to pick up their arms or mounted (Pl. V, 19), dismounting or leading a horse (Pl. V, 11); also wounded warriors, hunters with dogs, athletes (Pl. V, 16), squatting figures of negro slaves (Pl. IV, 14) and on one gem a boy riding a dog. Human heads, usually helmeted, occur, but have no portrait significance at this time (Pl. IV, 9, 11). It is rarely that indecent motives are found.

As may be seen, the scope of Archaic subjects is, after all, pretty large, when we consider how few of these gems, comparatively speaking, have been discovered, and the types we have mentioned must be taken, not as excluding others, but as indicating the trend so that a professedly Archaic gem that transgressed violently the spirit of the art of the time could be placed pretty positively among the forgeries to which Dr. Furtwängler alludes in the letter quoted from on page 32. Primarily there is a distinct joy in art shown through all this work and where the subjects have to do with deities and higher powers, as is inevitable when the luck-bringing element is sought after, we find nothing of the sacerdotal and theological inspiration that influenced the Asiatics, and next to nothing of the cult types of the Mycenæan Period. The Ionic race and its freedom of thought had come to the front, as the earlier dark ages with their stiffness and lack of imagination showed a Doric pre-eminence. This Ionic influence was the keynote of the Greek revival.

INSCRIPTIONS.—Few inscriptions have been found on the gems of this period. One that reads "I am the seal of Thyrsis;

open me not" is the most pretentious. This inscription occupies most of the field of the gem, a dolphin being pictured at one side. Others are the names of owners in the nominative case or one or two initial letters of their names. A picture of Kastōr and Polydeukēs as boys playing with knuckle-bones, inscribed, *Διδόσκοροι*, is a rare example of a descriptive inscription (Pl. VIII, 2), though it probably belongs after the transition period. Together with these we have several authentic artists' signatures.

ARTISTS.—Of the artists of this period we know in literature of Mnēsarchos of Samos, the father of Pythagoras, whose date was early in the sixth century. In this connection it is interesting to note that Diogenēs Laertius tells us the Pythagoreans were forbidden to wear the picture of a god on their rings, as being a degradation of a divine image. Also there was Theodōros of Samos (560-522 B. C.) who engraved the famous gem of Polykratēs, tyrant of Samos, which, as the story goes, he was advised by his ally, Amasis, king of Egypt, to cast into the sea, as his most valued possession, lest his continued good fortune should inspire the envy of the gods to visit upon him some greater evil. Its recovery from the belly of a fish and its owner's final capture and execution by Oroitēs, the Persian satrap of Lydia, make a fitting climax to the tale. There are many conflicting descriptions of this stone. Hērodotos, Pausanias, Dionysius of Halicarnassus and Suidas all say it was an emerald (*smaragdōs*), which Furtwängler thinks probable, in view of the existence of a Phœnician engraved emerald of the same period. The use of that name, however, does not necessarily imply that the gem was *our* emerald, since the ancient "*smaragdōs*" was used in a much broader sense and included many other green stones. Clemens Alexandrinus goes further and says that the device was a lyre, and King tells of a fine emerald beautifully engraved with a lyre above which hover three bees or cicadas, which was said to have been dug up at Aricia and which antiquaries at Rome hailed as the legendary signet. It is safe to guess that this gem was a ring-stone and Græco-Roman, but very probably both the material

and the device may have been suggested to its owner by the old story, and the lyre, as an attribute of Apollō, was always a favored subject on gems. Pliny's story that the stone, an unengraved sardonyx, was owned by Augustus and deposited by him in the temple of Concord, is, doubtless, a pure fiction in which Pliny himself seems to place little belief, while Dr. Benndorf's assumption, drawn from his reading of Pliny, that the device was quadriga is not very convincing. The name of Syriēs, found with the word ἐποίησε on a clear green, half translucent steatite gem of this period with a Seilēnos mask instead of the beetle-back (Pl. V, 2), and that of Epimenēs, written in Ionic style: ΕΡΙΜΗΝΕΞ ΕΡΩΙΕ (ἐποίει), on a chalcedony scaraboid indicate that these were artists' signatures. Furtwängler also suspects several other names, such as Sēmōn on a bluish black and white spotted scarab (Pl. IV, 19), to be those of the gem-cutters because they are in the genitive and written in small characters on well engraved gems, but I cannot feel his reasoning is convincing for supplying the word ἔργον (work) instead of σῆμα (sign or signet) in the inscriptions. This is a subject I will reserve for fuller discussion in the next chapter.

GREEK SCARABS FOR THE ETRUSCAN MARKET

At this point it may be well to refer to a small class of Greek scarabs made for the Etruscans. These are not always readily distinguishable from the Etruscan product, though the character of the work on the beetle and the unornamented base will usually enable us to place them. All early Archaic scarabs found in Etruria may be safely regarded as Greek importations. The Etruscan scarabs begin with the later Archaic style, and are very close to the Greek. Generally speaking, the Greeks put little or no polish in the intaglio. They worked out the beetle rather carelessly and left the line around the base unornamented, while the Etruscans gave their greatest care and skill to cutting and elaborating the beetle, even when the intaglio was poorly done, and decorated the base

line with a border of some kind. It was not long, however, before the Etruscans learned to do all their own work of this kind, and the style of such Greek gem-cutters as may have settled there absorbed the local characteristics and became thoroughly Etruscanized. This took place in the early part of the fifth century B. C.

PHŒNICIAN AND CARTHAGINIAN SCARABS

HERE, too, we must consider a class of Phœnician scarabs, most of the examples of which were found in Cyprus and Sardinia and which, as does most Phœnician art, reflects outside influences. The subjects show a combination of Assyrian, Egyptian and Greek ideas, but the execution and style have a strongly Greek character. This style, however, is easily distinguished by a certain dryness, stiffness and flatness quite different from the round, fresh, plastic and free order of pure Greek work. Perspective is either unattempted or feeble. Many of them show considerable beauty and delicacy but even the best have their foreign characteristics. Clothing, animals' skins, and hair are often indicated by parallel or crossed lines.

They begin in the sixth century and reflect the severe Greek style which, with Asiatic conservativeness, held on even into the fourth. Only from the middle of the fourth to the middle of the third century do we find their pictures worked out in the free Greek style. The artists seem to have been Hellenized Carthaginians or Phœnicianized Greeks.

Nearly all these gems are scarabs and the favorite stone was a green—sometimes a blackish—jasper, though the colored quartzes, especially carnelian and chalcedony, also occur, and these latter show, generally, a better type of workmanship. There are also many in a softer greenish serpentine and a few glass pastes. Most of them have a border either of a single line or the cable type and the exergue beneath the picture is very commonly filled in with criss-cross lines.

SUBJECTS.—Bel, probably Bel-Khamon, with a censer or a winged Sun-disc, appears constantly on them. Sometimes he

sits enthroned (Pl. VI, 9) or is pictured conquering an evil demon or a lion, though in these cases the militant figure may represent some king (Pl. VI, 5). When attacking the demon he usually swings an ax of Egypto-Syrian form, and the demon is apt to have a flat nose and is sometimes covered with hair like rarer representations of the Greek Seilēnos. The Egyptian god, Besa (Pl. VI, 4, 8, 10, 12), is also very common as a powerful, magic-working demon, who drives off evil, heals the sick, protects women, ministers in childbirth and guards children. His power is often symbolized by his holding out animals or serpents in one or both hands (Pl. VI, 8, 10), sometimes as if strangling them, sometimes by the hind legs. His figure shows the Egyptian type, with crooked dwarf's legs and he is sometimes winged (Pl. VI, 8). A more definitely Phœnicianized type wears a garment open in front in the Syrian style and showing one well formed leg (Pl. VI, 10). Sometimes he wears an animal's skin on his shoulders and often a crown of feathers (Pl. VI, 4, 8, 10). These styles of the Phœnician Besa always hold animals, generally four of them, and a second set of Phœnicianized pictures show him in profile, with the dwarf legs and a lion's skin, still conquering some beast or beasts (Pl. VI, 4, 12). The head is bald and the nose flat but the face is less grotesque and brutal than in Egypt; more like that of the Greek Seilēnos, who also appears in Besaesque type (Pl. VI, 11). Sometimes Besa is pictured running, either with the bent knee action or more naturally (Pl. VI, 8).

Though Besa is earlier than Hēraklēs, the representations of the two deities seem to have had some influence on each other. Where the former wears a lion skin or where, as on one scarab, he is shown riding a lion full front, the idea is probably borrowed. As for Seilēnos, the influence is even more marked, until, at last, the Besa type yields entirely, save for the slight reflex influence it exerted (Pl. VI, 11). The masks of both Besa and Seilēnos were considered most efficient as talismans and were often worked into other subject designs (Pl. VI, 7). The Besa mask is also shown combined with that of the demon, Medousa, a combination whereby the owner

sought to invoke the favoring influence of both (See Pl. VI, 6). Occasionally only the upper half of the god's body is pictured.

Tritōn-like creatures, sometimes with cup and wreath, perhaps Dagon, perhaps derived from Greek conceptions, are found on these scarabs, and also a sea-god not unlike Poseidōn, holding a trident and a fish or else seated on a fish or a sea-horse. He is often beardless, as is Poseidōn in Archaic Greek art. Also there are demons (Pl. VI, 3), often winged demons of the flying Erōs type, seirēns like those the Greeks pictured, and a representation of the killing of the tortoise sacred to Astarte. Hēraklēs, in whom the Carthaginians saw their national divinity, Melkart, appears only in the older style.

Besides these there are many examples of warriors (Pl. VI, 7), hunters, shepherds, kneeling men, men with ploughs, a few animals (Pl. VI, 13, 14), sometimes, probably, of astronomical significance, heads of negroes (Pl. VI, 6) or helmeted heads, as in Greek art, some purely Carthaginian heads, done more or less in Greek style, and combinations of several heads or masks (Pl. VI, 6) or forms, less tastefully conceived than the later Roman symplegmata or grylli but evidently embodying the same amulet or talismanic idea.

CHAPTER III

THE GEMS OF THE BEST PERIOD (480—400 B. C.) AND OF THE PERIOD OF THE FINISHED STYLES (400—300 B. C.)

GREEK-PERSIAN GEMS

BEFORE taking up the consideration of the pure Greek work of these periods we should glance aside at a class of what Dr. Furtwängler calls Greek-Persian gems: gems done by Greek artists for Persians' use. The Persians themselves could not have done such work. It is quite foreign to their methods. No scarabs are found among these and only a very few are cylinders. Some are of hemispherical shape, occasionally cut

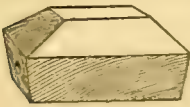


Fig. 22.

with facets like the later Babylonian signets. A modified prism, of varying proportions but cut, usually, as in Fig. 22, sometimes pictured only on the base, sometimes, also, on all its five upper surfaces, was an occasional form, but the great majority of the stones are scaraboids of unusual size and thickness (Fig. 18). Rarely both sides of the scaraboid were engraved; generally only the base. All the gems were pierced through the major axis for suspension from wrist or neck.

MATERIALS.—The material is nearly always a blue chalcodony (sapphirine) which, judging by its prevalence, must have had a magic-working repute among Orientals. Rarely we find rock-crystal, red-brown jasper, brown cloudy chalcodony, jasper and chalcodony mixed, agate, steatite, etc., in which case the gem is apt to have been made in Greece itself. Glass pastes also appear, especially a dark blue, a greenish white and a pure translucent white.

TECHNIQUE.—The workmanship is sometimes careless but the design is, for the most part, treated in the broad, easy manner characteristic of the Greek gems of the period. Only among the earliest, say before 450 B. C., is the space carefully filled and the treatment formal and precise. Generally they show the picture with an open back-ground, since the advancing Greek art sense realized it should be shown pictorially, as opposed to the earlier and purely decorative idea. Naturally the border is omitted. These gems may be dated, generally, from 450 to 350 B. C.

SUBJECTS.—Only Persian subjects were used, for, though the intercourse between Greece and Persia was then free, the Persian of the period, while recognizing Greek artistic skill, held himself stiff against the Greek spirit. Naturally the best workmen understood how to follow Persian ideas which they executed in Greek style. Later, the Persians, especially those not connected with court circles, the merchant class whose dealings with Greece were closer, yielded more and more to Greek influence.

These subjects, then, are Oriental symbolic religious types, suggest the courage and power of Persian kings or, and this is much more common, show pictures from Persian life. The costumes are correct and characteristic. The demonic element is found only in mixed animal forms, such as the horned lion-griffin with eagle's hind legs (Pl. VI, 17), bearded sphinxes, occasionally with a crown or horns, *seirēns*, and the winged bull, sometimes with a man's head. There are fights between Greeks and Persians (Pl. VI, 15), the latter nearly always mounted, also Persians with Greek captives. Battles between Persians never appear. Next to battle scenes, hunts are most common (Pl. VI, 18a, 21). In most of these there is apt to be a good deal of action but not much beauty such as is found on the best purely Greek gems. The horses, for here, too, the hunter is generally mounted, always have saddles and usually a knot in the tail (Pl. VI, 15, 21); dogs are often included, and the quarry is sometimes, though rarely, a demonic beast. Single animal pictures are lively and truthful on the later

gems of this series and include zebras, lions, boars (Pl. VI, 16), mountain goats, foxes (Pl. VI, 18b), wolves, deer (Pl. VI, 20), mice, dogs (Pl. VI, 18b), storks, swans, quail, hawks (Pl. VI, 18b), grasshoppers (Pl. VI, 18b), and the bear (Pl. VI, 18b) and hyena, the former seldom and the latter never shown in purely Greek work. Groups of animals are very rare. Where female figures, unknown in pure Persian art, are found, as they often are, on these stones, the hair is usually in a long braid-like arrangement with ornaments (Pl. VI, 22), and the artists follow the Persian costume of this time. Beware of a gem with a Persian woman wearing a cap or bracelets. The breasts and hips are generally rather prominent (Pl. VI, 22), with almost a suggestion of the Mycenæan female types.

GREEK GEMS

Returning, now, to the pure Greek gems of what we may call the Best Period, let us say from 480 to 400 B. C., the number of examples is comparatively small. They were copied later but to the eye of the expert the divergence, such, for instance, as a combination of drill work with sharply cut lines; a thing abhorred by Dexamenos and his contemporaries, is generally appreciable. That but few gems of this time have been found may be in part explained by the fact that the export trade had practically vanished, since, by about 500 B. C., the Etruscans had begun to do their own gem-cutting, while, as we have seen, the Eastern market wanted only work of its own kind.

Some stones, akin to the Greek-Persian gems, mostly large, thick chalcedony scaraboids with an open background, no border and a picture showing Eastern influence, may be attributed to the Asiatic colonies. They have a soft, broad, picturesque method, give the figure as if from a distance and do not indulge in much detail, but they are apt to lack care and exactness. Pl. VIII, 20 suggests this school.

The work of the Attic school shows much higher art and more subtle accuracy. The pure, quiet beauty of the Pheidian

ideals appears distinctly in some; in fact many of the gems of this epoch are undoubtedly copied from statues, the pedestal, even, being indicated, while others seem possibly to have been inspired by the great Athenian painters of the period. Also we find these influences in Magna Græcia and Sicily after the middle of the fifth century B. C. Much of the Italian Greek work is very fine and difficult or impossible to distinguish from that of Greece proper, except where, as in the case of Pl. X, 3, the subject suggests the provenance.

The scarab falls into the background, though in the Western Grecian world it held on pretty well through the free style of the fifth century. The Asiatic Greeks did not use it at all. Occasionally, as before, other forms in relief, such as a crouching lion, are substituted for the beetle, but the growing style is the scaraboid which took shape in the East and pushed gradually westward through the Greek world. The Asiatic and Island Greek examples are, as I have said, like the Greek-Persian scaraboids, of considerable size and thickness, and the curvature of the back is apt to be pronounced. The ring-stone form that was to control in the following epoch and which had even begun to be foreshadowed in the Archaic Period, is evidenced more and more definitely by occasional pictures on both sides of the stone and finally on the convex side alone. In these gems the convexity was made flatter and the walls of the scaraboid were gradually lowered. Several, dated about Alexander's time, show the convex face and the back almost joining. The advantages of the small ring-stone with a fixed setting over the clumsy scaraboid that, set in a swivel, dangled from neck or wrist, were obvious, and the growth of the idea was steady. Stones originally pierced for suspension are found set solid in rings of about 400 B. C. and simple unpierced ring-stones are not rare even by the end of the fifth century (Pl. X, 16). It is hard, however, to distinguish them from those of a later date except it be by some circumstance of the discovery. There are few early examples of flat ring-stones and none that can be dated much before 400 B. C. After that date the ring-stone forms begin to out-

number the scaraboids. Cylinders appear occasionally in somewhat modified form; that is, from 450 to 400 B. C. there are some Greek cylinders with one side flattened and often broader in the middle with the picture cut on the flat surface (Pl. VIII, 5, 19); also cylindricals with four flat sides, engraved on one or all of these (Pl. X, 15), the square-cornered stones with faceted tops and the picture on the base alone (Pl. VIII, 4) and, rarely, among Asiatic Greeks where the Persian influence reached, the conical (Pl. VII, 3) and hemispherical shapes. As with the Greek-Persian, there is no border in the Ionic gems save in a few cases of the milled, dotted or line border taken from the scarabs and found even in scaraboids of the free style. After 400 B. C., however, it is very rare.

MATERIALS.—Among the materials used, chalcedony completely dominated, especially in Asia Minor and the islands. Next common was carnelian and, next, banded agate, sardonyx usually cut across the layers as in the preceding period, and rock-crystal. Sard and lapis lazuli were rare but a mottled jasper or variegated jasper and chalcedony was fashionable among the better artists. There were also some scaraboids carelessly cut in a soft black stone. Green jaspers and amethysts have not been found among these gems. Glass pastes, however, were abundant, usually white or greenish white, translucent and nearly always in the form of the scaraboid. Only one or two other colors have been found, notably a dark blue, though the Parthenon treasury lists refer to glass seals of two and even seven colors.

TECHNIQUE.—With reference to the technique, Furtwängler divides the time between 480 and 300 B. C. into three periods: First, until 450, when the style, as a rule, still showed some severe elements (Pl. VII, 2, 13, 16; VIII, 5, 12, 13, 14, 22); second, 450 to 400, when is found that perfect freedom united with breadth and largeness of conception which goes to make up the ideal in engraved gems—the best the world has ever seen (Pl. VII, 1, 4, 5, 6, 9, 11, 15, 17; VIII, 9, 15, 16; 17, 19); third, from 400 to 300 B. C., when, while the technical

perfection of style was still maintained, the gems were somewhat inferior in conception, breadth, and pure beauty (See plates IX and X).

Broad and blunt cutting instruments were in favor through all this time and the result was round, soft, plastic effects. The drill was out of fashion, though used occasionally, but they avoided especially the contrast between the hole and the line. Long, broad strokes are characteristic, especially of the Ionic work. The engraving is either unpolished or else very slightly or only on the broader surfaces, save in fine gems, where a high polish occurs oftener as the period advances.

Foreshortening was attempted, unsuccessfully at first, but, later, very satisfactorily (Pl. VII, 15), and seated figures are common. Conventionalized Archaic poses are replaced by natural ones.

Casual examination of and deduction from the pages of writers on the subject tend to create an impression that high artistic merit was a universal sign manual of this period, but very little thought must lead to an assurance that this is impossible. The best work of a cycle when art instincts and skill are at their highest is always the most characteristic, and this consideration, together with the natural appreciation of connoisseurs for the best, combines to eliminate much study or consideration of mediocre and bad work. That inferior craftsmen working for poor patrons must have existed at all times is obvious, and the much greater difficulty of dating commonplace specimens reinforces the accepted conclusion. I have no doubt whatever that many gems which constitute the worst output of good periods stand classed with the characteristic work of poor ones, and there is a chance that much of it will always remain so, as being practically indistinguishable. This must be constantly borne in mind as a basis for careful study, slowness to generalize too violently and, often, ultimate doubt. The shapes of the stones are, of course, the initial guide, but when able authorities date many ring-stones in a period when the scaraboid was characteristic, because the intaglios on these ring-stones show a kindred

quality and style, it is well to remember that such theorizing should be indulged in with qualifications. On the one hand imitations of one period are apt to persist and, on the other, Furtwängler's remark that it is hard to distinguish ring-stones of this period from those of a later suggests that the ring-stone may have been much more common in the scaraboid epoch than is generally admitted by experts who attribute to it only those whose fine workmanship seems, from their standpoint, to demand such attribution. That they steadily increased in numbers is made clear by the ultimate development. In support of this we find several allusions in old authors, notably where Aristophanēs refers to musicians as "Lazy long-haired fellows with fingers covered with rings down to the nails." Gold, silver, and bronze rings with the seal cut in the metal were, to be sure, popular down to Alexander's time, but the passage is illuminated by Pliny's account of the rivalry of Ismēnias, the flute player, and the contemporary musicians, Dionysiodōros and Nikomachos, in the matter of buying and displaying engraved gems, a rivalry in which the cost of the articles played a much higher part than taste in their selection. The date of these gentlemen seems to have been about the time of the Peloponnesian War.

Of Ismēnias the story is told that, hearing of a *smaragdōs* (emerald?) on which was engraved a figure of the sea-nymph, *Amymōnē*, and which was for sale in the Island of Cyprus for six gold *denarii* (about thirty dollars), he commissioned a friend to buy it for him, and when the latter by bargaining reduced the price to four *denarii* the musician exclaimed: "By *Hēraklēs*! he has done me a bad turn in this, for the merit of the stone has been greatly impaired by this reduction in price." *Ælian* also speaks of the gem-engravers of *Kyrēnē*, at this time, as being "Wonderful", and states that the poorest citizens had signet rings worth ten *minæ* (about one hundred and fifty dollars). These statements should be read together.

SUBJECTS.—In the matter of subjects, as in the matter of technique, we may treat the "Best" and the "Finished"

periods as one, noting only the accentuation of the changing tendencies as time advanced. It is characteristic that gods, heroes and demons give way more and more to purely human subjects; this, doubtless, with the growth of philosophic skepticism, a lessening fear of supernatural terrors and a disposition of mind less inclined to invoke or propitiate the higher powers. Only those figures that lent themselves to the dominant idea of beauty and poetry were favored, such as Aphroditē, Erōs and, we may add, Nikē. The first named is relatively very common, in the fifth century clothed with a long tunic, a mantle and sometimes a hood (Pl. VII, 11, 15). In the fourth she is generally naked to the waist (Pl. VIII, 20 and 23—forerunners; IX, 3, 15) or wholly so, and the figures seem often to be copied from statues, standing, sometimes, beside a supporting column (Pl. VIII, 20). Many of her representations are in pretty domestic scenes and poses (Pl. VII, 15; IX, 3).

Erōs is often shown with her (Pl. VII, 11, 15; IX, 3) but still more frequently pictured alone (Pl. VII, 4; IX, 4). He is still a beautiful youth or half grown boy, for the later Cupid type, the pudgy child, had not as yet developed. The famous gem by Phrygillos which shows him beside an open shell, as when first born, is nearest to it (Pl. VII, 4), and he is also pictured flying over the sea. In the first half of the fourth century B. C., he is often bending a bow or loosing the arrow (Pl. IX, 4).

Nikē is third in frequency, often driving a four-horse chariot, once sacrificing an ox (See Pl. XX, 12, for the same subject in Græco-Roman times), playing at dice or kneeling and presenting the palm or the wreath of victory (Pl. IX, 12). In the earlier types she, too, is fully clothed, but in the beautiful pictures of the fourth century, where she is seen crowning a victor or raising a trophy (Pl. IX, 13), she is half draped.

Of other greater gods Apollō appears occasionally (Pl. X, 15c); once with Marsyas (See Pl. XXIV, 13, for the same subject in the Græco-Roman period), once mounted on a horned Persian lion-griffin and once as Apollō Kitharaidos.

Hermēs, binding his sandal or in some other trivial pose, also as a Herm (Pl. VIII, 15), such as Alkibiadēs and his friends were accused of mutilating, Athēna, Dēmētēr, Persephonē being carried off by Hadēs (Pl. VII, 16), Artemis (Pl. VII, 12) and Kastōr and Polydeukēs (Pollux) (Pl. VIII, 2), are all rare and appear generally as single figures, often as reproductions of famous statues though there are a few cult suggestions. Bacchic motives are not very common. The taste was too refined to admire the coarse Seilēnos types and only a few of them are pictured, such as the satyr seizing a mainad (Pl. VIII, 22), dancing (Pl. VIII, 18), or with an amphora or a wine skin. The dancing or raging Bacchantē is rather more frequent (Pl. IX, 6, 8), sometimes holding the hind part of a kid but always clothed. Pan is seen sitting with a bird perched on his hand (Pl. VII, 14), also the Hermaphrodite, pictured somewhat like Dionysos, and, once, a queer looking winged phallic demon with a thyrsos and shepherd's crook or pedum, probably Priapos. Tritōns appear (Pl. IX, 5), and Nērēids riding sea-animals were among the favored subjects and are found first in this epoch.

Hēraklēs continues from the Archaic Period (Pl. VII, 13; IX, 1, 9; X, 17), but of the labors only the conquest of the Nemean Lion is at all common. Thēseus, Diomēdēs, Odysseus (Pl. IX, 7), Philoktētēs (Pl. IX, 1), Kadmos (Pl. X, 12), and other heroes are found, though not very commonly, and in the early part of the period Pēnelopē was a popular subject, also Danaē, figured as a symbol of blessings bestowed by the gods and with no sensual intent (Pl. VIII, 12).

That these and other female heroic types were favored along with the male figures, marks the general softening tendency. Many mortal women appear on the gems, clothed, half clothed or occasionally nude and engaged in trivial occupations (Pl. VIII, 5; X, 11, 19) or domestic duties, perhaps playing on some musical instrument or with an animal (Pl. X, 14), perhaps meditating or unrobing for the bath like the Aphroditē pictures of a later time (Pl. VII, 17; VIII, 16). As Furtwängler well puts it, "We breathe the air surrounding Aspasia."

Also there are pictures of children at play. Ideal female heads are not uncommon (Pl. VIII, 13), and there is one, even, of a negress. Squatting negro slaves are still found (Pl. VIII, 11).

Among the representations of men the sandal-binding motive was most favored (Pl. VII, 8), then horsemen (Pl. X, 2, 13), charioteers, victors, athletes and warriors (Pl. X, 9). A youth playing a lyre is shown (Pl. VIII, 17). Portraits on gems first appeared in the fifth century, but we have only two or three authentic instances. In the fourth there were more, though they were not at all common (Pl. IX, 2). We know that Alexander the Great commanded that only Pyrgotelēs should be allowed to cut his likeness. This idea of the substitution of his own picture for that of some patron deity was probably justified by the young conqueror on the ground of his assumption of divinity. Portraits of him were held, at later periods, to possess a talismanic power; all of which suggests a motive for the restrictive edict, more powerful, perhaps, than mere vanity. Appuleius alleges as much when he speaks of it as "Threatening that if any other artist should be discovered to have put his hand to the most sacred image of the sovereign, the same punishment should be inflicted upon him as was appointed for sacrilege." From the many portraits of Alexander and the ordinary quality of most, it is easy to see that his face was a popular subject for centuries after he and Pyrgotelēs and the edict were dust. Heads of deities naturally occur (Pl. VIII, 9).

Of demonic animals the griffin is most common (Pl. VII, 6; X, 8), then the Sphinx (Pl. X, 18), reversing the relations of earlier times. The Chimaira, centaurs (Pl. VII, 5) and seirēns also appear, as well as a few fantastic combinations such as a sphinx-seirēn, a cicada-seirēn with griffin's head at the end of the tail, and a serpent shooting a bow. The figures Pl. VII, 7 and VIII, 6 belong to this class. Achelōos, the man-headed bull, is found as a south Italian subject (Pl. X, 3).

Natural animals were favorite subjects, the lion (Pl. VII, 2, 9), perhaps, most so, and beautifully done though not so strongly as in the Archaic Period and less truthful and vivid

than in the Mycenæan. There are also the panther, fox, lynx, wolf, and bear. Deer (Pl. VII, 6; X, 2, 8, 16) and does are common. Hunting scenes occur (Pl. X, 2, 16), the wild boar is found attacked by dogs, and the sow with her litter, while the lion or griffin are often attacking other beasts (Pl. VII, 2, 6; X, 8). The horse has never been better represented than at this time or in more positions (Pl. VII, 10; VIII, 14; X, 2, 13), and there are bulls (Pl. VIII, 1, 3), often butting, as on the coins of Thourioi (Pl. IX, 11), cows (Pl. X, 7), dogs (Pl. X, 14, 16), and, on one stone, probably Asiatic Greek, a camel. Of birds the heron and crane are commonest (Pl. VII, 1; VIII, 19; X, 5); then the eagle (with Ganymēdēs, Pl. X, 6), goose (Pl. X, 16), swan, duck, rooster, hen (on one gem the last two are shown *in flagrante delictu*) and dove (Pl. VIII, 20). The insect types are generally flies or grasshoppers (Pl. VIII, 4).

Symbolic designs are rare, though there is one of two clasped hands (Pl. X, 4) with the motto, *χαῖρε καὶ σὺ* (Be thou happy). Of still life there are also few examples, such as a krater between two dolphins, a tripod (Pl. X, 15a, 15b) or an amphora (Pl. IX, 14). Neither were obscene representations at all popular:—in fact, contrary to the notions of many modern moralists, these are rare throughout all antiquity and most of the pretended examples are modern forgeries.

Furtwängler also calls attention to an evidently astrological picture of zodiacal signs which he dates fifth to fourth century and cites as the earliest gem-picture showing a knowledge of the celestial globe (Pl. IX, 10).

INSCRIPTIONS.—During this period there is an increase in the number of gems bearing inscriptions. Nearly all of these evidently have to do with the owner of the signet, being, as before, either his full name or one or more of its first letters. One fifth century scaraboid has no picture but only an abbreviated name, *ΙΣΑΓΟΡ*, perhaps for Isagoras. Some few describe the subject as did the Etruscans on their scarabs (Pl. VIII, 2, 9), a few bear such words as *χαῖρε* (Be happy) (See

Pl. X, 4) or δῶρον, indicating that the gem was a gift, and a few are artists' signatures. These, naturally, are not likely to be found on any save very good works and then, according to Furtwängler, they were tucked away so as not to be conspicuous and interfere with either the general design or with the purpose of the signet. This is certainly plausible enough as a theory. We shall refer to it later in connection with the facts.

ARTISTS.—Of the artists of this period we find several certain and probable names, but the one pre-eminent, both in merit and in the number of authentic signed works extant, is that of Dexamenos, the Chian, who probably worked at Athens between 450 and 400 B. C. We have four gems that can be attributed to him. The first of these, a chalcedony scaraboid of light brownish tone with a milled border which bears the signature, ΔΕΞΑΜΕΝΟΣ, in the lower left hand corner, represents a lady at her toilet with a slave before her holding up a mirror and with a garland in her hand. Owing to the form of the letters, and the broad breast, narrow hips and treatment of the hair, all showing connection with the severe style, Furtwängler dates it about 450 to 440 B. C. Above is the name ΜΙΚΗΞ, the genitive of Mika, a woman, who was doubtless the owner, and who evidently chose for her signet device this picture of herself in a familiar pose, though it is not probable that any accurate portraiture was attempted. The gem is interesting as showing the need and use of signets by women, perhaps as a careful housewife to guard her goods against pilfering slaves, perhaps as a wealthy hetaira who indulged in business ventures.

The second, a scaraboid of yellow jasper sprinkled with red, has a similar signature in the upper left hand corner. It also has a milled border and is a picture of a crane standing on one foot and preening its wing. Under the raised foot is a grasshopper, and the design and workmanship are very beautiful. The third, the famous flying crane (Pl. VII, 1), is a bluish, somewhat clouded chalcedony scaraboid. The border

is a single line, and the gem, which was found at Kertch in the Crimea, and is now one of the chief treasures of the Russian Imperial Cabinet, bears the full legend, ΔΕΞΑΜΕΝΟΣ ΕΡΟΙΕ ΧΙΟΣ (Dexamenos the Chian made), in two horizontal lines at the bottom of the stone. In the fourth gem, a yellow and red chalcedony scaraboid, also with the simple line border, and ΔΕΞΑΜΕΝΟΣ ΕΡΟΙΕ in two lines at the top, Furtwängler thinks the artist reached the summit of his excellence, an opinion that is by no means unanimous among critics. It is said to have been found in a grave at Athens and is evidently the portrait of some eminent Athenian. Evans dates it about 450 B. C. and hazards the chance that it may be Kimōn, but Furtwängler disputes this on the score of its not agreeing with Plutarch's description of him and also because he places the date later, between 430 and 420 B. C. King calls it the artist's own portrait which is, of course, pure guess-work. Incidentally I may add that the signature has been doubted, though I think unjustifiably.

That Phrygillos, who resided at Syracuse in the second half of the fifth century and designed coins there, but who probably learned his craft at Athens, may also have been a gem-cutter is more than suggested by a carnelian, probably cut down from a scaraboid, which bears the name, ΦΡΥΓΙΛΛΟΣ. The design is Erōs, resting on one knee and one hand, and, behind him, the open shell from which he was born (Pl. VII, 4).

In the first half of the fourth century, when Attic art had found place among the Arcadians, we find the name of the Athenian, Olympios, who designed coins for them, on a carnelian ring-stone engraved with an Erōs drawing his bow (Pl. IX, 4). The name is in the nominative but the minute size of the letters together with the knowledge of Olympios' ability in kindred work leads Furtwängler to consider it an artist's signature. With much less reason, I think, he maintains that the letters, ONATA, adapted on a fillet attached to the spear leaning against a trophy which a half-draped Nikē is erecting (Pl. IX, 13), is the signature of Onatas, whom he regards as a

contemporary of Olympios. The stone is a chalcedony scaraboid and the work is certainly beautiful enough to inspire its author with a desire to sign it, but my personal feeling in the matter is one of grave doubt as to the antiquity of the gem itself. The style is too pretty, and either an artist's signature or an owner's name on a part of the design itself is, to say the least, unusual.

Besides these, there was undoubtedly Nausias, an Athenian, as we learn from an abusive passage preserved from an oration delivered by Lysias. No signed work of his has been discovered, but some people may accept his description as a debauchee as being presumptive evidence of his possession of an artistic temperament.

In this part of the subject it is always easy to speculate, but quite evident that we are on highly speculative ground. There is no definite evidence save in the direct statement of the ἐποίησιν; and, when we find, as we do, the name of the same artist, in the nominative, on a gem of similar character, there is a pretty good presumption that it indicates the engraver, is a signature, and that the ἐποίησιν is to be supplied. Why, then, should we attach any weight to names in the genitive with which it is quite as reasonable to supply σῆμα (signet) as ἔργον (work)? Again, when we find on gems the names of coin designers, like Phrygillos and Olympios, there is also a fair presumption of identity, and these, too, are in the nominative, while a direct precedent for the use of the genitive in owners' names is found in the "Mikas" on the undoubted work of Dexamenos, mentioned above. Quite apart from gems, the fact that the names of the designers on coins occur inscribed in either case shows that no definite inference can be drawn from this source alone, and, generally speaking, I believe that with a name in the nominative we have as much right to supply ἐποίησιν as to put ἔργον with one in the genitive. As for the arguments drawn from the fineness of the art and the small size or unobtrusive place of the letters, these seem to me no more than plausible grounds for clever guess-work and not

generally sustained by precedents. The last two considerations, at least, have evidently not been uniformly regarded in cases of known signatures and, for the first, while it supplies a motive, we can only suggest that it is a motive which has proved ineffective in the instances of quite a number of masterpieces. The reverse of it, however, I think may be counted on: that a name on a cheap gem is not the maker's but the owner's.

Pyrgotelēs, who alone was commissioned to cut the portrait of Alexander, may be classed at the end of this epoch but, unfortunately, we know him only historically. No gem that can be attributed to his hand has yet been found, but such a splendid discovery is always among the possibilities. The probabilities are that no artist's signature would appear on any portrait of the divine king but that it would not be omitted on other work of the "Gem-engraver to His Majesty".

CHAPTER IV

ETRUSCAN SCARABS

THE art which we see exemplified in the wide field of Etruscan scarabs was entirely a borrowed development. The form of the scarab came to them from their intercourse with Egypt, Phœnicia and Carthage, and from the early importation of Greek work and Greek artists, doubtless with a full suggestion of its efficiency as an amulet, but, unlike the Greeks, they clung to it through all the periods of their output with a conservatism that goes far, in my mind, to support the theory of their Oriental origin. In the matter of subjects they drew, at first, altogether from the Greeks and, even when they diverged upon lines of their own mythology and ideas, the initial influence is always apparent.

During the sixth century we find in Etruscan graves, as I have said, imported Greek scarabs and, also, Egyptian and Phœnician, but not after the early years of the fifth century. By then their own manufacture had so increased as fully to supply the demand.

The form of the Etruscan gem was, as the chapter heading indicates, always the scarab, except in very rare examples of the substitution of some other relief back. Generally, even when the intaglio is poor, the beetle is worked out carefully and well and the rim around the base is usually decorated except in many early scarabs of the first period: a peculiarity which gives an easy method of distinguishing the native Etruscan from the Greek work. Sometimes the ornamentation was by a leaf pattern, sometimes by fine crossed lines, sometimes by parallel strokes. Only in the case of small, careless examples does this distinguishing peculiarity fail. In late Etrus-

can work we are apt to find the form of the beetle drawn out into a long oval. The best scarabs are often relatively small and the work on them almost microscopic.

MATERIALS.—By far the commonest stone, used from the first to the last, was the carnelian, often of the dull, opaque variety found in Italy. In the drill-work scarabs, of which I shall speak later, it was practically universal. The sardonyx and banded agate were not uncommon and seem to have grown in favor, being often found in the later elongated beetles. Chalcedony was rare, always of the gray variety, and there is a single example of the plasma. Green jasper, so much favored in the Phœnician gems, was not used, and of the pastes, there are a dark blue, a brown, a green and white, and an imitation of sardonyx upon which the work seems to be invariably cheap and poor. Amethyst was never used.

TREATMENT.—The picture, as in the old Greek gems, is made to fill the entire space, and all manner of twistings and bendings are resorted to in order to effect this end. It was always, save in some of the cruder specimens of the drill-work class, surrounded by a border, generally of straight or oblique milling between two lines, known as the cable border, or by one of dots; rarely by variants of Figure 20, above, and, in a single example, by a sort of leaf pattern (Fig. 23). Here again a craftsman trait is found in the fact that the border is often



Fig. 23.



Fig. 24.

more carefully done than the picture. In very late examples we find criss-cross lines with dots (Fig. 24), and in rude drill-work scarabs, often a single line. Occasionally the figures



Fig. 25.



Fig. 26.

stand on one or more lines which are sometimes ornamented, and the exergue is frequently filled up, not with crossed lines

in the Phœnician fashion but with the design shown in Fig. 25 (See Pl. XI, 1, 6, 8, 15; XII, 5) or, in one example, as in Fig. 26 (See Pl. XI, 7).

TECHNIQUE.—The Etruscan, being primarily an imitator, may be said to have shown the qualities of the craftsman rather than of the artist. In technical treatment and minuteness of detail the best scarabs reached a high degree of excellence, but even these seem often to suggest the workman, proud of what he can do, rather than the artist who subjects himself to his art. From the best they grade down to the rudest combinations of mere drill-borings: large scooped out depressions peculiarly susceptible of a high polish. In older specimens the polish of the interior of the design was slight, as in the Greek work of the period. Soon, however, striving artisan-like for mere decorative effects, they elaborated it more and more, until a high interior polish became characteristic of Etruscan work. It is evident that many of these gems, especially of the drill-work class, were made as ornaments pure and simple, since we find them in their original settings as necklaces, earrings, etc. Varying peculiarities of technique can be best considered in their connection with the various stylistic developments of the art.

INSCRIPTIONS.—Inscriptions are common on Etruscan scarabs except on those of the drill-work class, where we do not find them. There are no names of owners or artists. The inscription seems always to be descriptive of the picture—often misdescriptive: names of Greek heroes given not only to characteristic representations of them, but often to entirely impersonal figures or even incorrectly as on a gem where Kastōr is shown burying Polydeukēs. These inscriptions are, generally speaking, on the best gems of the earlier styles and are done in Etruscan letters and spelling. The majority of the inscriptions read from right to left in the impression, but many run from left to right.

The alphabet, as given by Dennis, together with several forms I have added, is:

A	AAA	P	∠∠∠
E	ЭЭЭ	Σ	MMΣΣΣ
Z	±‡1}, rarely	T	ΥΥΤΥΥ
Θ	◊◊⊙⊙⊙⊗	τ	ΥΥ, rarely ΥΥ
I	I	Φ	⊙⊙8
K	>>, rarely	X	ψψ↓, rarely X
Λ	√√	Aspirate	⊞⊞
M	WMWM	Digamma	ϜϜ
N	WHYN		
Π	ΠΠΠ		

(equivalent to the Latin v and pronounced, probably, like w)

Naturally, in the minute lettering on gems, minor variants from the above are often found. The E, for instance, frequently seems quite regular. In older examples the letters, as in the old Greek style, end in approximate points. Later they appear often rounded off with little dots. Many false inscriptions were added in the eighteenth century on genuine scarabs and often require some knowledge of the antique in order to distinguish them (Pl. XIII, 23, 24).

SUBJECTS.—These varied considerably with the stylistic developments under which heads I shall, also, refer to them. Generally speaking, we may say that sacerdotal and cult scenes play a small part, and luck-bringing ideas are rare. The "picture" was the thing, and art for art's sake, as many of our own artistic artisans phrase it, seems to have supplied the controlling motive. Even when gods are represented they are apt to have their purely Greek attributes which shows a pictorial rather than a devotional purpose. The Athēna with wings is Archaic Greek as well as Etruscan, though the Etruscan deities had a weakness for wings; so, too, her attribute of the serpent (Pl. XI, 1). The bearded Dionysos is essentially Greek, but the added attributes of Zeus and Poseidōn—thunderbolt and trident, as found on one gem—is an Italian idea and indicates the breadth and scope of the Dionysiac cult. Poseidōn appears, too, with his own symbols, and Apollō slaying a polypus, symbolic either of his sea power,

of the Sun-god dispelling the winter or of the healing divinity combating the demon of pestilence. The monster here shown is also pictured on very early Greek gems and is perhaps the prototype of the Pythōn of sophisticated legend. Hēphaistos is much more the Greek god than he is the Etruscan. Hermēs appears as the conductor of souls, which latter, besides being figured in human form, either as small eidolon figures (Pl. XI, 24; XII, 1, 2) or coming up from the ground or out of a jar symbolizing the Under-world (Pl. XII, 19), are also shown as birds, more especially the swan with a human head (Pl. XIII, 19) or even as butterflies, or are indicated by the butterfly wings on a female form,—these as early as the fifth century B. C. Frequently winged figures are not easy to name (Pl. XI, 24; XII, 6; XIII, 11, 14, 15). A bearded, winged man with a sleeping hero is, doubtless, Hypnos. Thanatos, also, may be represented (Pl. XIII, 15), but many of the winged deities, male and female, baffle identification. Erōs is found, both in the severe and in the free style of Greek art (Pl. XII, 25) and always as a boy budding into youth. The Earth-giants are pictured, either as wild looking men hurling rocks (Pl. XII, 21) or often, with wings and serpent legs, fighting against gods, especially Zeus and Athēna; a favorite Etruscan subject. In the matter of nomenclature, the Etruscan deities as identified with the Greek were Tinia for Zeus, Nethuns or Nethunus for Poseidōn, Charun for Hadēs, Sethlans for Hēphaistos, Turms or Mercur for Hermēs, Pupluns or Phuphluns for Dionysos, Usil or Aplu for Apollō, who, however, often bore his Greek name unchanged, Lala, Losna or Thana for Artemis, Turan for Aphroditē, Cupra or Thalna for Hēra and Minerfe, Menfre or Menrva for Athēna. In some of these it is easy to see the Roman derivatives.

On all the earlier scarabs, Greek hero types from the poetic cycles are very common. The Promētheus myth is pictured on one gem, Laokoōn on another (See Pl. XVII, 6). Kapanēus is a favorite, either being struck by lightning (Pl. XI, 9, 20), falling from a ladder (See Pl. XVII, 4) or bearing half a gate. Tydeus appears, wounded and falling (Pl.

XII, 3), also Pēleus, Atalantē bathing or anointing herself, Achilles with the arrow in his heel (Pl. XIII, 20), picking up his arms (Pl. XIII, 24), nursing his grievance (Pl. XI, 4) or with Penthesileia (Pl. XI, 15), Paris bending his bow or drawing an arrow from his quiver (Pl. XII, 14), Aias (Ajax) killing himself (Pl. XII, 15) or bearing the slain Achilles (Pl. XI, 7), Odysseus carrying the sack of Aiolos containing the captive winds or sacrificing a ram preparatory to his descent into the lower world, Kastōr fatally wounded (Pl. XII, 11), Perseus, with or without the winged shoes of Hermēs, either cutting off or carrying away the head of Medousa (Pl. XI, 14; XII, 9), Jasōn with his ship, the Argō, Ixiōn bound to his wheel (Pl. XII, 16), Tantalos trying in vain to drink (Pl. XII, 17), Hyakinthos (Hyacinthus) wounded by the discus of Apollō (Pl. XII, 18), Aktaiōn with his dog (Pl. XII, 20), Philoktētēs bitten by the serpent (Pl. XIII, 21), Thēseus lifting the rock, an unidentified hero striking a serpent and another riding on a tortoise which he is feeding, Triptolemos in the winged chariot. Kadmos at the spring seems to be found only in gems of the later style (Pl. XII, 22) and Hēraklēs, very common on the later gems, was rather rare on the earlier ones. On these latter he is leading away a woman as a bride, fighting some adversary (Pl. XI, 6), carrying off Turan, the Etruscan Venus, contending with the river-god, Strymōn, by filling his stream with rocks, seated on his own funeral pyre (Pl. XI, 21) or seizing Earth-giants. Also the Italian saga of his being lifted up to Heaven to become a god is pictured (Pl. XIII, 13). See also, Pl. XII, 4, 5, 12. Other heroes may be shown occasionally, and there are many pictures which we cannot identify but which present a fruitful field for speculation. There are heroes departing, consulting, arming, disarming, mending armor, fighting, being borne away wounded, cutting off an enemy's head, inspecting it, resting, a kneeling archer, a young warrior kneeling or bending over, a youth with a dog or holding an amphora, a lyre, a staff or a shepherd's crook, etc., etc. (Pl. XI, 5, 8, 11, 13, 16, 17, 18, 19, 22; XII, 24; XIII, 24). Also there are a few young heroes

sacrificing, a soothsayer (Pl. XIII, 10) and a youth with a priestly mask such as was used in Etruscan cults.

Of course some of these may be scenes from everyday life (Pl. XI, 17, 18, 19; XII, 24), but we suspect the heroic element in all, not only because of the hero names that are arbitrarily added to them in so many instances (Pl. XI, 4, 6, 7, 11, 12, 13; XII, 3, 9, 11, 14, 16, 20) but because there does not seem to be much of the human life element otherwise pictured or that appealed to Etruscan taste. Female figures are shown carrying, filling or emptying urns, bearing heroes away or supporting them when wounded.

A representation of a human head (Pl. XII, 7) is found on a few gems, mostly later ones, and there is one that shows a bust that looks as if it were impaled, one, a head combined with a rooster, and one, a face combined with a lion's head and a satyr mask. Such conceits suggest the otherwise rare magic-working idea.

Animal figures are very infrequent at first, though there are examples of the lion (Pl. XI, 10), lioness, a horse lying down and rolling and goats fighting in heraldic attitudes. Later they become more common, especially in the drill-work gems. There are but few demonic beasts.

The Etruscans seem to have had a special taste for scenes of fighting, bloodshed and death and this taste is well in evidence in their scarab pictures.

STYLISTIC DEVELOPMENTS.—Considering stylistic developments, we find first, toward the end of the sixth century, the distinct Archaic treatment of, for the most part, stiff single figures standing or walking, and rarely bent or twisted as in later work (Pl. XI, 1—3). They are clothed and the tunic is often trussed up, falling to the middle of the leg or showing the contour of the legs and hanging between them in parallel lines. Occasionally there are groups. There are no inscriptions on these gems and the types are generally of gods rather than heroes. The winged Athēna, sometimes with a snake or snakes as attributes (Pl. XI, 1), is a favorite; also other winged goddesses, the bearded Dionysos, and Hermēs, Zeus

and Athēna contending with Earth-giants. Some seem to be direct copies from Greek work.

In the second group, which may be roughly dated from 500 to 450 B. C., we find the Greek transition style of the beginning of the fifth century become the classic Etruscan (Pl. XI, 4—21). They are very similar to the sculptures of the Aigina pediments and the vases of Euphronios, and the pictures can only be distinguished from first-class Greek work by a certain dryness, stiffness and lack of that freedom which the most perfect craftsmanship and the most painstaking care cannot attain. Explanatory inscriptions are characteristic (Pl. XI, 4, 6, 7, 11—13, 17) and heroes are shown instead of gods, single or in groups of two or, rarely, more figures, generally unbearded, naked or partly so, with Greek helmet and even the Ionic corselet when a corselet is worn. The figures are seldom upright but bending and twisting in all manner of contorted attitudes. Females hardly appear, except Atalanta, who is shown naked. They seem to have especially favored the heroes of the Theban War, often adding their names to impersonal pictures. Warriors kneeling, often wounded, (Pl. XI, 5, 7, 9, 15, 16, 20) and the athlete with a strigil (Pl. XI, 12) were popular. The figure, the bodies of which are usually in full front, begins now to be shown with one leg in profile, the other with the foot foreshortened (Pl. XI, 12, 14); some have the weight resting on one leg, some on both. The muscles are all carefully worked out, including the *linea alba*, and the hair is represented with fine locks curling at the end (Pl. XI, 6, 11, 12, 14, 18, 19), though occasionally it is done only by parallel strokes. The knot or bag arrangement at the back of the head is also in evidence (Pl. XI, 4, 5, 8). In some there is found a tendency toward fuller, softer, rounder and more fleshy bodies, yet with the *linea alba* running down from the navel, as in the severe Greek style.

Still dating roughly from 480 to 450 B. C., we find scarabs which show the free Greek style breaking through (Pl. XI, 23; XII, 1—10), though the legs, very frequently one full front, the other in profile, and the shoulders, overbroad and square,

still bear traces of the severe. The figures, let us say of Class Three, are now often upright and the head, sometimes shown in full face (Pl. XI, 23), begins to look rather square, with the hair lying flat. Clothing, when represented, is treated more naturally. An unbearded Hermēs is here found along with the hero types (Pl. XII, 1, 2, 5—10).

From 450 to 400 B. C. (Class Four) the influence of the free Greek style is apparent in forms without the hard treatment of muscles and that leave little to be wished for in beauty and accuracy (Pl. XII, 11—21). Some groups seem to be suggested by Greek paintings. The bodies are large and fleshy, rounded but nevertheless powerful. They are rather too heavy and lacking in light elegance, and the heads, inclined to be square as in the work of Polycleitos, are pictured in all views. The hair generally lies flat, though sometimes a head showing Archaic survival has the hair with little twists at the end of each stroke: a sort of craftsman's essay at the older curled up treatment. A departure from former styles is found in the usual profile presentation of the upper half of the body. Contortions, which are still resorted to for the purpose of filling the field, are handled much better as is the foreshortening. Often the figures wear a short mantle which is apt to follow the curves of the back and serve more as a background than a covering (Pl. XII, 14, 17, 19). The severe style of showing one leg in profile and one in full front is now generally given up. Inscriptions are still found, but more rarely (Pl. XII, 11, 14, 16, 18, 20) and, while the youthful hero types are still the favored subjects, there are also Apollō, Poseidōn, Hēphaistos and other gods.

Of course, with these, there are many gems that it is impossible to place with any degree of accuracy. They may be poorer examples of former periods or late affectations of earlier styles. It is in cases of this character that Dr. Furtwängler often attributes with a definiteness which I cannot feel is justified.

Finally, in the fourth century, the style loses all traces of severity (Pl. XII, 22—25). The space is no longer filled

on principle, though the tendency is still very apparent, and inscriptions are generally lacking. The body is apt to be plump and soft but the workmanship shows a distinct falling off in finish and accuracy. We now find a departure in the occurrence of female figures from the cycle of Aphroditē, but the number of gems of this class is much fewer. The inspiration of Greek methods fails before the growing popularity of a native stylistic movement to be now considered.

A distinct and typically Etruscan development of what we may not unfairly call the scarab industry is found—say from 425 to 275 B. C.—in what I have referred to several times as the drill-work class of scarabs (Pl. XIII, 1—19, 22, 23). The great majority of the scarabs found and to be seen in collections are of this type and they occur not only in Etruria but all over Italy, in Sardinia, and at many points in the East, indicating a heavy exportation. Also they show many grades of excellence but are for the most part rude, sketchy, unattractive and lacking in artistic or even technical merit. Features and hair are often not even indicated. Of course the blunt drill was occasionally used on scarabs of other classes, but in these the entire design is made up of a number of saucer-like depressions of varying dimensions. All these gems are highly polished in the intaglio and seem generally intended for ornaments rather than signets. In some of them there is found an attempt to imitate the more antique work, the figures being finished, especially their clothes, wings, heads and hair, with a sharp instrument (Pl. XIII, 10—19). The last is then represented by parallel straight lines, ending, sometimes, with turned up strokes. Furtwängler hesitates whether to place these gems as of exclusively Etruscan or of broader central Italian origin.

Generally speaking, the entire class stands distinct and by itself and, though some bear copies of the older scarab motives, such as kneeling and running men, warriors, etc., they have, in the main, their own subjects as well as their own style. Furtwängler speaks of only two bearing inscriptions, one in Etruscan and one in Latin, and suggests that many of them,

along with the fourth century gems last noted, may have been made in other parts of Italy, perhaps by the Samnites. The almost total absence of inscriptions deprives us of any direct evidence on the subject and it is easy to argue both ways from the pictures. Though Etruscan in character they seem less exclusively so than do those on the other classes of scarabs, and many Italian ideas appear, especially in such cult figures as the Campanian river-god, the man-headed bull, Achelōos (Pl. XIII, 23). We may hold that the Etruscans made the gems and, naturally, modified the subjects when they sought to please foreign customers, or that the Italians had learned from the Etruscans and absorbed Etruscan notions, as the Etruscans had absorbed the Greek. In the light of present knowledge, only the German savants will settle such questions for you positively—an aid which is somewhat marred by their settling them in so many different ways.

As a suggestion, it seems, at first glance, rather surprising that, with the long lines of finished gem-engraving among the Greeks of the South and the Etruscans of the North, the middle districts should have remained in a state of barbaric unproductiveness, but, on the other hand, we know that these latter races were, for the most part, rural folk, and they may have found it more convenient to buy the few gems they needed. It is, generally speaking, rather later that we find distinctively Roman work.

Among the subject motives, which also distinguish the drill-work scarabs from the others, are, first and foremost, many Hēraklēs (Pl. XIII, 2, 5, 9, 12, 13) and Seilēnos (Pl. XIII, 8) types which have here a tendency to grade into each other. Both appear carrying large amphoras (Pl. XIII, 2, 8), kneeling upon a deer, or floating on a board laid over amphoras (Pl. XIII, 12. Compare Pl. XII, 13), sometimes with a sail added and even with sun, moon and stars in the field. Hēraklēs is by far the more common of the two. Sometimes Seilēnos is figured with him and occasionally he has some other companion. Also he appears seated, deep in thought (Compare Pl. XII, 12), wearied, bathing, bringing water from

a spring and, on some gems, catching it in his lion skin, but the amphora attribute is the most persistent. Evidently there was a cult connection in early Italian legend between Hēraklēs and Seilēnos or between local deities with whom they were identified, and there is evidence that it had to do with nature, water, and the protection of springs, especially warm springs. The Latin and Roman rustic god, Sylvanus, shows a possible Hēraklēs relationship in the fact that both presided over hot springs, and their Chthonian power was recognized in the sacrifice of swine. On the other hand, the amphora motive often seems to suggest something quite different from the water idea, and the attitudes of the figures indicate the love of a stronger beverage: Bacchanalian tendencies which, in the case of Seilēnos, are, of course, quite in character.

Of the greater gods, there is Apollō, whose worship spread early through Italy. Sometimes he is borne upon a swan, as at Chalkēdōn, or in a wagon drawn by deer; also Artemis appears with her attendant deer and Lētō fleeing with her two children.

Of demonic figures we find centaurs, Pēgasos, the Chimaira, seirēns (Pl. XIII, 16, 17), Medousa, Tritōns (Pl. XIII, 6), fantastic combinations of demonic forms (Pl. XIII, 22, 23), and many unidentified winged personages (Pl. XIII, 11, 14, 15).

What cult figures there are seem to be broadly Italian rather than restricted to Etruscan ideas. The man-headed bull, for instance (Pl. XIII, 23), is especially Campanian. Hero types are almost entirely lacking, but animals, sometimes arranged with one head for two bodies or the reverse (Pl. XIII, 1, 7), are more common than on other classes of Etruscan

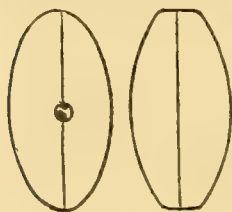


Fig. 27.

scarabs. When ordinary human figures are found they are often mounted and fighting (Pl. XIII, 3), or in chariots (Pl. XIII, 4). The Gallic shield (Fig. 27) is characteristic and tells of the wars between Etruria and her northern neighbors.

In the third century. B. C., with the

growing Roman supremacy, the national types of Etruscan scarabs gradually die out. Their influence on Roman developments was marked and will be shown later. Also it is possible that work on more or less Etruscan lines continued for some time in other parts of Italy but, as a purely national art, it disappeared.

FORGERIES.—During the early half of the nineteenth century, the enthusiasm of collectors was especially directed toward Etruscan scarabs, following the new discoveries in Etruria, and, consequently, in that golden age of forgery, these gems received a large share of attention from the makers of such frauds. The drill-work scarabs were especially easy to imitate, and much confusion was introduced into the fields of study and connoisseurship. Still, the highest order of the forger's skill does not seem to have been applied to them, still less the highest order of forger's knowledge. They turned out machine made beetles in large numbers and quite failed to consider the extreme care with which, as I have said, the Etruscan artist treated the back-relief, even when his intaglio was rude and barbarous. This part of the work, though still mechanical, is done much better today, but, on the other hand, there seems to be little attention given to making the forgery plausible as a whole; so little, that, in examining the up-to-date scarabs in Italian shops, one even hesitates as to whether they have been done with intent to deceive. If they have, it can only be for the tourist market. I have never seen one of the forgeries Dr. King speaks of as the work of skilful hands of the end of the eighteenth century, when, he says, they took genuine scarabs with poor designs, ground them down and cut a good picture on the base. He holds that they exposed themselves by the Roman rather than Etruscan character of their intaglio work but a much easier test would be based on the impossibility of cutting down a scarab far enough to obliterate the original design without leaving indications of such work on the base or the base ornamentation.

Of course the best safeguard is found in demanding the unanimous verdict of material, character of subject, archæolog-

ical accuracy, treatment, style, etc., as conforming to the period and class of which the gem purports to be. For instance, among the imitations of one kind or another there are many amethyst scarabs which can be dismissed with the brief comment that the Etruscans did not use that stone. Altogether, it is usually better to reject every gem of which you feel in the least suspicious, for a suspected antique is a much less satisfactory possession than a piece of known modern work. With advancing knowledge you may occasionally come to suspect scarabs once bought with all confidence. That is a part of the price you pay for experience and information which can hardly be gained on other terms. It should be philosophically entered in the profit and loss column.

A word may be added, in closing this chapter, about the not very rare practice of cutting down scarabs so as to make them fit in rings. As a piece of barbarism it is fairly diagnostic, but I would be inclined to regard the fact of a gem having been thus treated as pretty fair presumptive evidence of its genuineness. I doubt if the forger ever lived who was quite fool enough or clever enough, if you please, deliberately to depreciate the value of his goods to that extent, while to build a forgery on such lines *ab initio*, so that it would not disclose its secret, would require an order of genius which I like to believe is not to be found among these gentry. It certainly is not among the commercially inclined, though it cannot be denied that there have been very rare instances of forgery for forgery's sake, where mere love of deceiving the cognoscenti and pride in the exploit seem to have been the motive. The danger of coming upon such a work is rather infinitesimal and, even so, our artist is not apt to be infallible.

CHAPTER V

GEMS OF THE HELLENISTIC PERIOD

THIS period may be said to extend from about 300 to 100 B. C. and, in Greece proper and the East, to nearly the Christian era. In Italy and the West the Roman-Italian style, of which the next chapter treats, began to affect it after 100 B. C., having first been affected by it, until, during the principiate of Augustus, the whole blended into a world-wide Græco-Roman uniformity.

During the preceding epochs it has been possible, generally speaking, for experts to date particular gems with some accuracy, though I doubt if the claim to being able to place within a decade can often be made good. Now, even the most "German" theorists admit that, barring a few definite phenomena and the inferences to be drawn from them, anywhere in two hundred years is the best they can pretend to do. Doubtless many Græco-Roman stones of a later period are also indistinguishable from true Hellenistic gems. The shape of the stone is no longer a guide, for scarab and scaraboid have practically disappeared with the exception of a few poorly done scarabs bearing Egyptian symbols like the cross, systrum and wingless sphinx and which are probably Alexandrian work. There are a very few pierced, rather longish four-cornered stones and conical seals of various forms, but the ring-stone now was practically universal.

These had begun to develop, as we have seen, as a matter of convenience, from the scaraboid, the rim of which gradually disappeared until the convex and flat surfaces met and the picture was usually cut in the former. Naturally there was then no place or need for piercing, and thus the ring-stone

with a strong convexity on the picture side became the characteristic form of the Hellenistic gem. A unique example is pictured on both sides as is the case with some Græco-Persian scaraboids. Along with these there are also a great many flat ring-stones. A few large gems were set in gilded or even in hollow rings.

MATERIALS.—Chalcedony is still very common but ceases to dominate, and the mottled chalcedony and jasper which Dexamenos loved appears occasionally. The fashionable stones were those introduced from the East by Alexander and his successors: the hyacinthine and Syrian garnets, generally cut with a strong convexity to allow for the best play of light and occasionally concave on the under side. Small garnets with careless cuttings are common, especially in the East, down to the time of the Empire. The beryl now appears for the first time and, naturally, only in the best work. The same is true of the topaz. Amethysts, also cut convex, as were most of the transparent stones, come again into favor, and rock-crystal is still used. Carnelian, agate and sardonyx remain common, and in Italy and the West, dark, translucent sards, cut convex, rival the garnets. Peridot and aquamarine occur rarely.

Pastes were considerably used, sometimes moulded, sometimes engraved. The white is no longer found. They seem to have preferred green, yellow, brownish and, more rarely, violet. Some were quite large and convex.

TECHNIQUE.—The style now was pretty much the same all over. It was simply a natural development in the line of the tendencies we have already indicated, often an over-development. "Greatness" had generally disappeared. Softness, a minute detail effected by fine sharp lines which take from the breadth of the work, and a desire for showy contrasts were popular. Anger and joy were depicted. Soft, fleshy forms in reposeful attitudes were favored. While they strove for plastic beauty, they spoiled it by the sharp lines, used especially in depicting the hair, occasionally, even, of the eyebrows. The eye is generally large and well open, sometimes with a pupil (Pl. XIV, 3; XV, 11; XVI, 1, 2, 4, 7—14), and the elongation

of the figure was often carried to excess (Pl. XIV, 2). Still there is great charm in much of this work. Often there is a characteristic lightness and sketchiness which is not the result of carelessness but is born of the artistic tendency to slur over details and emphasize only essentials (Pl. XIV, 2, 4; XV, 1, 4—8, 15). It might almost be called an impressionistic movement. Many gems reproduce the easy attitudes, sensuous conceptions and emotional tendencies found in the sculpture of Praxitelēs and Skopas (Pl. XIV, 3, 5—8, 11, 13) and, of course, there is much work that indicates classicism (Pl. XIV, 2, 14; XV, 21)—an archaic tendency to reproduce earlier ideas and ideals even to the milled border which, as I have suggested, may result in the misdating of the stones on which it is found. This is especially the case with representations of gods, where conservatism would be most natural.

Good engravings were highly polished; poor, and even the clever, sketchy ones were generally left more or less dull.

SUBJECTS.—The convex, oval stones usually carry but one figure treated in a statuesque manner, often leaning against a column or in some similar pose (See Plate XIV). Groups, however, treated somewhat pictorially, are found occasionally (Pl. XV, 1, 4, 16). The bust instead of simply the head is characteristic of much of the portraiture of this period (Pl. XVI, 1—3, 5, 8, 12—14), and full-face representations of men and gods are not rare (Pl. XVI, 7, 12, 13). Faces are generally beardless. Subjects and poses were repeated, which suggests their derivation from favorite statue or painting types, a practice much in favor during later Augustan times.

Portraits which now appear in large numbers on deeply cut stones are the most significant development of this period. The political prominence of many individuals throughout wide regions and the consequent desire to compliment them fostered this tendency. We have many of Alexander, perhaps considered luck-bringing on the basis of his own good fortune and, later, of Mithridatēs (Pl. XVI, 2); probably, also, Dēmētrios Poliorketēs, Dēmētrios Philhetairos, Ptolemaios Sōtēr, Eumenēs I, and many others (Pl. XVI, 1, 3, 4, 6, 8, 14). Those of rulers

doubtless tended, with time, toward idealization. Those of private persons who followed the princely custom of using their own likenesses for signets are probably much truer to life (Pl. XVI, 9). Also seemingly ideal heads are not infrequent (Pl. XV, 19; XVI, 11).

Among the representations of deities, Aphroditē (Pl. XIV, 11; XV, 4, 8, 12?) and Dionysos (Pl. XIV, 6, 13) are by far the commonest, generally as single figures and in reposeful attitudes. Usually the former is half draped, with the upper part of the body nude. Erōs, in many attitudes and, now, for the first time, often pictured as a chubby child, is represented with her (Pl. XIV, 11; XV, 4, 8), and a practically new development is found in pictures of the Psychē myth from the dialogue of Platō. She is generally shown as a maiden without wings but often, also, symbolically, as a butterfly captured or even ridden by Erōs. Occasionally he is singeing her with his torch. A few pictures suggest cult scenes (Pl. XV, 5, 13). Hermaphrodites are common, as are the mainad (Pl. XIV, 9) and the youthful satyr (Pl. XVI, 13), the last, also, a new conception of this epoch.

Many deities were now beginning to be world-wide, and foreign cults were more affected. Serapis (Pl. XV, 15; XVI, 12) and Isis (Pl. XV, 11) are common, more or less Hellenized. Harpokratēs is found (Pl. XV, 17); Apollō appears of course (Pl. XIV, 5, 8); Artemis, with tunic to her feet (Pl. XIV, 4), sometimes with the attribute of Tychē, a horn of plenty, and Agathē-Tychē, half nude, with the cornucopia (Pl. XIV, 12), Hermēs binding on his sandal, Athēna (Pl. XIV, 2, 14) and Korē. A river-god, swimming, is commonest among the lesser divinities, and also the nymph, Galēnē (Pl. XV, 10), Ōkeanos (Oceanus), and other allegorical conceptions of the nature myths, as which the cultured mind of the period had now begun to regard much of its theology. Pēgasos is purely decorative and the few demons found are apt to represent nature elements.

The heroes are now rare. Even of Hēraklēs only the head is apt to be represented and that as of a young man or even

a child (Pl. XV, 18). The reverence for purely heroic deeds had vanished and the comparative popularity of Odysseus (Pl. XIV, 10) seems to indicate the growth of statecraft and trickery as the more acceptable ideals.

Pictures from everyday life are not as common as might be expected. Nude or half nude female figures in Aphroditic poses occur (Pl. XIV, 7; XV, 12), the lion-hunt is not unusual, and we find chariots, several processions of horsemen, a return from the hunt (Pl. XV, 16) and a banquet scene (Pl. XV, 1). Neither are idyllic pictures especially in evidence. There are a few that represent rural scenes: ploughing, animals, etc. Suggestions of the world of philosophy appear, such as the picture of the seven wise men inspecting the terrestrial globe, and of literature, in the combat between a crane and a pigmy. Kelts are sometimes portrayed, and, of course, female figures, sitting, walking, playing on instruments, dancing, etc. As in the best epoch there are few obscene motives. One picture of a serpent may suggest the phallic idea.

Along with these subjects there were, doubtless, also, a great number of cheaper seals for poorer wearers on which were represented a head, an animal (Pl. XV, 20), a mask, a helmet (Pl. XV, 9), or some one of the many attributes or symbols even more popular in later times. There were thunderbolts, caducei, sometimes winged, horns of plenty, flowers, wheat-ears, vases, utensils of all kinds and other devices of similar character or significance. Many of these unquestionably were adopted as luck-bringing, others seem purely decorative, but Dr. Furtwängler admits his utter inability to place their dates even as closely as those of the more characteristic designs, or, for that matter, to distinguish them with any degree of certainty from the great mass of similar representations which belong to the Græco-Roman period of the early Empire.

INSCRIPTIONS AND ARTISTS.—The names of owners are, naturally, by far the commonest inscriptions on these gems, often abbreviated, but we have also the names of several artists, foremost of whom is Lykomēdēs (ΛΥΚΟΜΗΔΗΣ) on a beautiful portrait of an Egyptian princess, probably Berenikē I,

with the attributes of Isis. Nikandros signs a female portrait bust, probably of Berenikē I or Arsinoë II, with ΝΙΚΑΝΔΡΟΣ ΕΓΡΟΕΙ, Pheidias, a picture of a youth with one leg raised (ΕΙΔΙΑΣ ΕΓΡΟΕΙ) (Pl. XV, 14), and Gelōn, an Aphroditē with ΓΕΛΩΝ ΕΓΡΟΕΙ in two lines. Sōsis is credited by Dr. Furtwängler with a large and very fine gem picture of Hēraklēs killing a centaur, signed ΞΩΞΙΣ ΕΠΟΙΕΙ, but I confess myself unable to feel quite satisfied as to its genuineness. The name of Philōn is only known from a portrait head engraved in the metal of a silver finger-ring. That he also cut in stone can be only inferred. The signature reads ΗΛΩΝ ΕΠΟΙΕΙ.

In the second century B. C. we have Agathopous, with a portrait head signed ΑΓΑΘΟΠΟΥΣ ΕΠΟΕΙ, and another name, known only from a signature in metal: Hērakleidas, whose ...ΑΚΛΕΙΔΑΣ ΕΓΡΟΕΙ appears with a portrait head engraved on a gold ring. Furtwängler places him as a Dorian of Sicily or southern Italy. At the end of the period we find Onēsas thoroughly authenticated according to the same authority by the ΟΝΕΣΑΣ ΕΠΟ, inscribed in two lines on an Athēna (Pl. XIV, 14), the ΟΝΗΚΑΣ ΕΠΟΙΕΙ, also in two lines, on the glass paste showing a muse with a lyre and the ΟΝΗΚΑΣ with the head of a youthful Hēraklēs. There is no doubt as to the genuineness of all three gems, and the signatures, also, are probably authentic.

Of others, the portrait gem signed, ΔΑΙΔΑΛΟΣ, now at Paris, seems to be generally accepted as bearing an artist's signature. I have not seen it and, therefore, have no right to an adverse opinion, but theories are queer things, and the gem is a portrait, the signature in the nominative, and without the *ἐποίησεν*. Furtwängler places Daidalos definitely in the third century. The two gems which he attributes to Skopas, perhaps influenced somewhat by there being two with the same name, are the portrait head signed, ΣΚΟΠΑΣ., and the nude female figure signed, ΣΚΟΠΑ (Pl. XIV, 7). Still, neither the name-forms nor the letterings correspond, there is no *ἐποίησεν* in either and Skopas was not so rare a name as to make unlikely its belonging to two owners of signets or, if you please, to an

owner and to an artist. Of Apollōnios, as given on the strength of the portrait head with the name, $\Lambda\Gamma\text{Ο}\Lambda\Lambda\Omega\text{Ν}^{\text{I}}$, in the genitive, I cannot feel that his identity as an artist is absolutely established as against the owner hypothesis, though it seems probable.

Furtwängler places Boēthos in the Hellenistic Age, on the strength of the cameo showing Philoktētēs fanning his wounded leg and signed, ΒΟΗΘΟΥ . Gem and signature are unquestionably genuine. Pausanias, Cicero and Pliny all tell of a Boēthos who seems to have been a native of Chalkēdōn and was a famous silver-chaser early in the third century B. C. They do not speak of him as engraving gems, but that he did such work, too, is a reasonable supposition, especially if the report be accurate of the bronze Herm of Dionysos, signed by him, recently found in the sunken galley which the French have discovered off the coast of Tunis.

Athēniōn and Prōtarchos are also dated in this epoch; the former on the strength of one cameo, the latter of two. They seem to be late Hellenistic, though Athēniōn has also been placed as Augustan.

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CHAPTER VI

MIDDLE ITALIAN GEMS OF THE ROMAN REPUBLIC

JUST when the Romans began to use gems for their signets cannot be exactly placed. While the early citizen was influenced by and the later affected a republican simplicity, yet they never scorned to copy good things from their neighbors, and they had neighbors on both sides with whom the custom had been long standing. Therefore it was that some of them who had had the advantages of foreign intercourse and absorbed a measure of foreign culture and taste took up this form of art, at least as early as the middle of the third century B. C. It is true they had rather looked down upon the conquered Etruscans as luxury loving and dissolute, but they could not fail to recognize the art superiority of the Greeks of the South, and they had good reason to know that there was nothing contemptible about the prowess of gem-wearing Carthage. We know that the earliest Roman signets were cut in the metal of their rings, but it would have been interesting had Livy or Florus told us more about the vast number of gold rings, one to three measures of doubtful dimensions, taken from the Roman dead at Cannæ and sent by Hannibal to Carthage as an evidence of the greatness of the slaughter, since gold could only be worn by men of a certain rank. The women seem to have been allowed greater liberty in this respect. Florus says "rings," Livy, "rings of gold," but neither speaks of the gems with which at that time it is certain that many of these must have been set. The story of Marcellus' ring, told by Livy, shows that Roman consuls had such signets and that the devices on them were well known. Even at an early time it is hard to imagine that the Etruscan export trade circled all around the growing Republic and did not cross its borders.

Presumptively, however, it is in the third century B. C. that we begin to find work that indicates a national demand and manufacture along the lines of a national taste. This was, doubtless, initially supplied by artists from the North and South. A few of the earlier stones are scarabs (the scaraboid was never very common in the western Greek world), but nearly all are ring-stones, and, for that reason, it is only comparatively recently that they have been distinguished from the gems of a later period. Furtwängler speaks of them as "drier, more labored, and poorer" than Hellenistic work of the same time, but most students may find it difficult to apply such criteria with any satisfactory certainty, especially as, doubtless, the majority of true Hellenistic intaglios were "dry," "labored" or "poor." It is the subjects and also the inscriptions on many of those that bear them, upon which the less technically trained connoisseur must rely for identification and, in connection with such features, workmanship, material, shape, details, and provenance, where it is known, may be corroborative elements in deciding.

These gems were the signets of the Romans and of the Romanized Italians of the period from, say, the third century to the beginning of the principate of Augustus, 31 B. C. With the death of Etruscan gem-engraving as an independent industry and a revival of the art under the less cultured auspices of the new masters of Etruria, there must of necessity be found an initial retrogression, a comparative lack of fine work and artistic appreciation. The Italian cared nothing for the scarab. He wanted simply a signet, and the Etruscan engraver and his pupils turned their attention to supplying the first demand, until the Greek and the Hellenized Roman elbowed them out.

As might be expected, we find two distinct influences governing early Roman glyptic art: that of the Etruscans of the North and that of the Greeks from the South, and, since the work fell under these influences, these gems have been divided accordingly into two classes.

First, then, the Etruscan influence went, at the beginning,

to produce, as I have said, a few scarabs, mostly of the long drawn out shape characteristic of many late Etruscan gems. Even the ring-stones are apt to show scarab characteristics, being flat, often lengthened, ovals, entirely filled by the picture which is usually surrounded by the cable, sometimes by the dotted border. A few are squarish with rounded corners and nearly always with a border. The figures often stand on a base line with the exergue occasionally filled with lines or points. Convex picture surfaces are rare in this group. These are, of course, borderless.

MATERIALS.—The popular materials in this group were, first, the agate or sardonyx cut across the layers, next the carnelian, chalcedony and a few dark sards. There is a single example of the aquamarine and a very few of the nicolo so popular in Roman imperial times. The early Roman scarabs are all of banded sardonyx or agate, with a few carnelians and a single example of the plasma, unique, also, in having a convex picture surface, but which may be of a later date.

Among the pastes which were very common and go to show a wide taste for gem seals among poorer people who, doubtless, wore them set in iron rings, we find imitations of the fashionable stones, the sardonyx and agate with a band of white across the red, brown or black, also the nicolo. The violet with a white stripe was a purely original idea, made in imitation of no stone, and, like it, is a light green paste with a dark blue band bordered by two white stripes which seems to have been popular in the first century B. C. Carnelian was poorly and only rarely imitated, but the dark sard, often verging into brown, was easily made and by far the commonest of all. Violet paste also was easy to make and common, although the amethyst was not a stone engraved in Italy at this time. Blue paste, too, was much used, but the white and green, so popular in Greece, was rare. Naturally the pastes we find are, as a rule, much worn and corroded.

The pictures on these artificial gems were, as might be expected, copies of the best of those on the real stones, got by taking impressions which were afterward carefully worked out

as to details, often with the wheel, and, finally, well polished. In the cheapest examples, little if any finishing was done, and in some the rim and back are rough as if they had not left the maker who had waited in vain for a purchaser before finishing his product and adding such inscription as might be desired. Through the first century B. C. the numbers of pastes reached their highest point.

TECHNIQUE.—The engraving may be said to be characterized by a certain superficial cleverness and lacks development. They wavered somewhat between styles but their most persistent trait is a preference for the severe characteristics of the best Etruscan work, sometimes leading to archaic imitations, sometimes shown only by a certain stiffness. Of course they fell behind their models. The relation is also evident in the bending of the bodies and in the cloak following the back in a curve (Pl. XVII, 9, 11, 14, 16, 18). There is little appreciation of flesh or of accuracy in handling muscles. The archaic treatment of stomach muscles in three folds is often affected, but roughly and unintelligently. Also there is the preference for beardless faces, but the heads lack character and definiteness. Though there seems to be little artistic feeling but rather dependent imitativeness, there are not lacking examples of good workmanship where all the details are well treated (Pl. XVII, 8, 23). Probably early in the period is a small group distinguished by soft plumpness and thick heads, shown, often, in full face (Pl. XVII, 7, 25) and, at the end, a group, almost always on banded sardonyx or agate, which show only a single figure with considerable unoccupied background (Pl. XVII, 20), dry and uninspired, with stiff, coarse treatment of garments and the hair done archaically in a roll. Their subjects are taken from the late Hellenistic cycle and, of course, there is a growing tendency to approach the second group of Italian gems which we will consider later.

Drill holes and sharp lines were combined on the same stone, and hair and beards were very commonly represented by cut lines with little drill holes at the ends. Often a staff or some similar line is made up entirely of drill holes (See Pl.

XVIII, 8). We also find on these gems a certain treatment of the hair at the back of the neck found on no other class of stones save a few scarabs; a bound together mass of long, parallel strokes (Pl. XVII, 7). Sometimes it is shorter, rounder and more natural (Pl. XVII, 9, 20). The hair in front is, also, often done with parallel lines, while the hair band is a line of little drill holes (Pl. XVII, 18). Also there is the rolled hair treatment, especially on the later stones spoken of above (Pl. XVII, 20, 23). The severe treatment of the legs, one facing and one in profile, is not rare (Pl. XVII, 2, 3, 6, 10, 25), and, sometimes, even, a foot in full front is attached stupidly to a leg in profile.

The work on these gems can in no way be connected with that on the coinage of the period which shows a free style without severe characteristics. Only the hair on the Janus head on the æs of 268 B. C. suggests them. All in all, they seem to represent a distinct development of Roman ideals, adopting, on the one hand, the severity of old Etruscan art and, on the other, expressing seriously in it the warlike national thought and ancient religious beliefs. Furtwängler regards them as the seals of the old Roman party that frowned upon Greek innovations and the lure of Greek art.

SUBJECTS.—The greater gods are rare, an omission upon which some light may be thrown by the opinion of the famous jurist, Ateius Capito, as given by Macrobius, which censures wearing a god's figure on a ring on the score of the profanation to which the sacred forms were thereby exposed. This seems to parallel the injunction of Pythagoras cited in an earlier chapter.

The subjects that do appear on these gems may be divided generally into two classes: first, pictures from the hero-sagas which, while they show an increasing knowledge of Greek poetry, are yet taken primarily from the Etruscan adaptation of the ideas. As representing the warlike deeds of semi-divine warriors, they were calculated to appeal to the Roman of the period. The facts that the Romans believed themselves to be descended from the Trojan stock and that many of the

Greek heroes of the siege of Troy were fabled to have founded Italian cities explain why the heroes of the Trojan cycle were by far the most popular.

Of the Theban legends we find Kadmos or one of his companions represented as a youth going with a pitcher to the well and, again, attacked by the serpent that guarded it; also Kapaneus falling (Pl. XVII, 4), and Oidipous (Œdipus) before the Sphinx (Pl. XVII, 17), sometimes killing it as a sacrifice or, again, the Sphinx is pictured alone or seizing a youth. Other heroes are Perseus with Medousa's head, rarely Thēseus, still more rarely Hēraklēs, and there are also Orestēs and Élektra at the tomb of Agamemnōn or Orestēs being led up for sacrifice to the Tauric Artemis. Orestēs, too, is probably pictured killing Klytaimnēstra, while a Fury rising from the ground attests the horror of the matricide. Bellerophōn is shown with the winged horse Pēgasos.

Of the favored Trojan war legends there is Diomēdēs, alone or with Odysseus, stealing the Trojan Palladium and Diomēdēs killing Dolōn; Odysseus fighting beside Aias (Ajax) or aiding him to protect a fallen hero, probably Achilleus, inspecting Achilleus' arms, being recognized by his dog, Argos, or ploughing while Palamēdēs lays his child before him in the furrow. That Tēlegonos, son of Odysseus, was fabled to have founded Tusculum, and that the Roman family of the Mamilii traced their descent from him go to explain this popularity. Ajax also is found on many gems, especially, as in the old Greek group, bearing the body of Achilleus on his back (Pl. XVII, 13), also, on a ship's prow, fighting beside his archer brother, Teukros, or holding in his hand the arrow that has slain Achilleus. Achilleus appears playing the lyre, sometimes under the teaching of Cheirōn (Pl. XVII, 3), killing captives at the tomb of Patroklos, fighting Penthesileia or other Amazons or with the arrow in his heel. The fight over the body of Patroklos is also pictured, the parting of Hektōr and Andromachē, Hektōr's body trailed behind Achilleus' chariot, Priamos before Achilleus recovering Hektōr's body, or, together with Hermēs, bringing it home, Machaōn dressing a wound,

perhaps of Philoktētēs (See Pl. XXV, 17), and many wounded heroes, heroes in camp, arming, and, occasionally, fighting, who cannot be satisfactorily identified. When a woman is helping arm a hero it may be Thetis and Achilleus or Hectōr and Andromachē. Philoktētēs, who was fabled to have founded Petelia, a city always faithful to the Roman alliance, appears in many attitudes such as bending the bow of Hēraklēs, bitten by the serpent or trying to escape from it, but most commonly, abandoned on the island, either seated and fanning the flies from his wounded leg with a bird's wing, supporting himself with a staff or dragging himself along. Laokoön and his sons attacked by the serpents (Pl. XVII, 6) is one of the most interesting types of this series. In fact, what has been said about the Etruscan hero pictures applies pretty generally as to the scope of these gems.

Of course a good many of the unidentified pictures may be merely warrior figures with no heroic or personal attribution. The numerous examples of a mounted warrior or a warrior leading a horse, for instance (Pl. XVII, 2), can hardly be taken from the Greek sagas. Many of the types are represented as armed only with shield, helmet and, perhaps, greaves, as the Greeks showed them (Pl. XVII, 4, 5, 12, 24). Others wear a full panoply (Pl. XVII, 2, 13) or the adorned armor and the peculiar corselet with the skirt cut out in scallops that denote the Italian method of representation (Pl. XVII, 8).

A warrior seated or standing with a head or helmet of an enemy in his hand is a favorite picture (Pl. XVII, 20) and, sometimes, the headless body is shown or the warrior stands on his dead foe. Occasionally the conqueror is stepping on the prow of a ship, and there are groups of two men, one holding the head, or, perhaps, one or two men cutting a body in pieces. The prevalence of this motive would seem to argue some special heroic representation but there is a suggestiveness in the frequent absence of helmet or shield and in the way they grade off into pictures that are evidently of religious ceremonies involving sacrifice, a meaning which is especially apparent where an altar, the sacrificial knife or the double-

headed ax is present. The idea of human sacrifice was not foreign to most of the old Italian cults, and the upper body of a youth rising from an altar (Pl. XVII, 18) or two youths kneeling before one, both found on these gems, may relate to such ceremonies. Altogether the meaning of the hero and head pictures has never been satisfactorily explained.

Returning for a moment to less usual hero types, there is a not infrequent representation of a dying hero writing on a shield (Pl. XVII, 5). Sometimes dead enemies are shown beside him, sometimes only their arms. The picture probably refers to some poem which tells of the exploit of the Spartan Orthryadēs who, alone surviving in the battle with the Argives at Thyrea of which Hērodotos tells, used his expiring strength thus to record his victory. Of Roman heroes we have a gem with probably a representation of the three Horatii, in Italian armor, from the epic of Ennius, and frequent pictures of some Italian hero kneeling with a drawn sword (Pl. XVII, 8), which Furtwängler tries to explain but most unsatisfactorily. Were it meant for Decius Mus, as he suggests, we should probably find some indication of the cincture Gabinus, as being vital to the story. The not uncommon pictures of Mucius Scævola are generally modern but I have seen one, possibly of later date than these early Roman gems, which seems to be genuine.

There are also many pictures of heroes or minor deities engaged in magic work of some kind. Daidalos, who was closely connected with the Apollō cult of Kumē, where he built a temple to Apollō and consecrated his wings, is shown with Ikaros. Promētheus is a favorite gem figure and is shown with sceptre, knife or measuring rod working at the figure of a man (Pl. XVII, 14). Sometimes a horse or ram is standing near, watching the miracle that is to conquer them. The Promētheus creator legend was current in the Orphic and Pythagorean cults, once very strong in Italy. Also there are other figures of artificers, perhaps of magic-working smiths, perhaps Cyclopes or Kabeiroi but more probably Daktyloi, working over arms or metal urns of some kind. The fact that Orpheus was a pupil of the Idaian Daktyloi is suggestive in this con-

nection. Shipbuilder types, sitting or standing, are also common (Pl. XVII, 16), and suggest Argos working on the Argō.

Of hero-sacerdotal types we find the frequent picture of a hero consulting an oracle where a woodpecker, sacred to Mars, perches on a column and answers him. Snakes twining around the column indicate the power of divination, and a ram, also sacred to Mars, is often shown as the sacrificial animal (Pl. XVII, 12). In another type there is no column or woodpecker; the ram's head lies on the altar and the hide hangs on a tree around which the serpent twines. Many pictures represent oracular divinations, especially those which show several heroes drawing lots from an urn or, perhaps, where an ox is being offered for sacrifice by warriors or a priest (Pl. XVII, 25).

Sacerdotal and purification scenes are also common, such as one where a bald priest, perhaps the Rex Nemorensis, holds a branch over an altar while two men approach, one where a man holds a sacrificial bowl or a censer before an altar (Pl. XVII, 21), is leading up a goat, killing a dove, holding a sacrificial knife and a goat's head (Pl. XVII, 10), or laying a bough on the altar. Perhaps a picture of a mourning youth, with a vase, standing near a column may be classed with these, and interesting guesses may often be hazarded as to the scene or cult intended to be represented.

Also among the sacerdotal pictures of worship are the many showing single figures standing before an altar, adoring an idol, a Herm or the genius of some place represented as a serpent, and of Roman cult characters, the augur with his lituus (Pl. XVII, 19), a pullarius with a sacred fowl, busts of priests with pointed caps (Pl. XVII, 19), such as the pontiffs wore and, most interesting of all, the Salii carrying the sacred shields (Pl. XVII, 1) or dancing.

The cult of Diana Nemorensis is undoubtedly evidenced in a clothed female figure, with a stag, standing by an altar and holding, generally, a bough in one hand and a dish of fruit in the other. A later picture of the same character equips the goddess with the bow according to the Greek idea (Pl. XIX, 2),

and the youth about to sacrifice a stag on an altar (Pl. XVII, 9) may be Virbius, her first priest, in whom the Italians saw Hyppolitos. Probably this personage was a development of an original Dianus, the male counterpart of the local deity whom time had relegated to an inferior position.

An interesting group of these cult pictures represent a head rising from the ground, apparently in response to some magical invocation made in order to obtain oracular advice or information (Pl. XVII, 22). Sometimes they do not preclude the idea of a body below the ground, still attached, but often the head is evidently severed. Generally it is unbearded. Usually the listener is writing down the response and, occasionally, there are two or even three of these. Neither Tages, the mysterious dwarf of the old Etruscan myth whose body would be shown at least in part, and who could, therefore, be the subject in only a few of the pictures, nor the head ploughed up on the site of the Capitol, which did *not* speak, can be intended, since it is quite evident that one purpose inspires the entire series. Furtwängler seems to have solved the problem. He holds that it is the head of Orpheus fabled to be kept near Antissa in Lesbos, where it uttered the oracles of Apollō. These gems would thus be signets of members of the Orphic cult. Akin, perhaps, are the pictures that show a peasant or several peasants finding a skull (Pl. XVII, 15), often with a butterfly floating over it.

Many gems have reference to the raising of the dead, the crowning magic of all times. Some have to do with the harvest mysteries which underlie the old grain-god myth, such as those that show a man sowing while Proserpina rises from the ground with an ear of corn. Others picture, probably, some form of the story of Polyeidōs drawing Glaukōs, son of Minōs, from the honey jar in which he was smothered. Hermēs Psychopompos is the recognized prototype of the belief in resurrection from the Orphic and Pythagorean standpoints, cults that appealed powerfully to the typical Romans of the third and second centuries, as that of Bacchus repelled them. Thus Hermēs is often shown, either bearded or unbearded, raising

a body or calling it up through the ground from the Under-world (Pl. XVII, 11). Orphic influence is also evident in the frequency of the peacock, pictured now, as later, in various combinations (See Pl. XVIII, 13). It was a symbol, in that cult, of immortal bliss, and was, as such, taken over into Christian mediæval art.

A purely national signet is found in the pictures of the wolf or of the wolf suckling Romulus and Remus. This, naturally, has been an attractive subject to forgers. Where the twins are included and the wolf's head is not turned toward them, there is ground for definite suspicion, as the type is contrary to the statue forms and these were likely to be followed. In the group now at Rome, where the wolf is gazing fiercely, as if at some foe, the figures of the twins were added later, and ignorant forgers have often taken it as their model. With the wolf and twins are frequently found the shepherd, Faustulus, and a figure or bust of Mars or Roma is occasionally introduced (See Pl. XXV, 3).

It may be gathered, as has been suggested, that the class of signets we are now considering were, for the most part, those worn by adherents of the conservative school of Roman thought—those who, despising or affecting to despise the frivolities and even the culture of Greece, clung strongly to the more serious side of life in all its phases—ancient tradition, heroism, deep religious feeling, and all that went to make up the early ideals of the Republic. Throughout the second century B. C. the conflict was on between these and the adherents of Hellenism. A departure from the Greek and Etruscan gems which showed no historical pictures is found in the occasional adoption by Romans of scenes from or devices commemorative of their personal or family histories. Sulla's signet representing the surrender of Jugurtha is an evidence of this as is also the signet of Q. Cornelius Lupus: a horse's head and two Gallic shields, which probably commemorated the victory of one of his kinsmen over the Gauls, either C. Cornelius Cethegus who defeated the Insubres in 197 B. C., or P. Cornelius Scipio Nasica who beat the Boii in 191. Nevertheless, most historical

scenes must be regarded as forgeries. They certainly were highly exceptional, one of the many points of which the fabricators were ignorant.

Also, at this time we find, perhaps, the first example of a signet showing the taste, later so marked at Rome, for the luck-bringing symbols of the eastern religions: a man riding a Capricornus (Compare Pl. XXVI, 29). The goat-fish combination was originally a Babylonian god-symbol and its appearance here was probably due to the Chaldæan astrologers who must have done a thriving business in Italy, since they became of sufficient consequence to be expelled from the city by a special law in 138 B. C. The great popularity of Capricornus at a later period is explained by its being the birth sign of Augustus.

Rural life is occasionally exemplified in pictures of a shepherd or shepherds, and there are a few animals, mainly horses and bulls. Nearly all the gems of this class, however, show human figures.

INSCRIPTIONS.—With the exception of a few descriptive inscriptions on the fourth century scarabs which may be of Etruscan workmanship and the legend the dying hero spoken of above is writing on the shield (Pl. XVII, 5), all the inscriptions on these stones refer to the owners' names. Rarely they are engraved in Greek letters and, sometimes, even, the names are translated into Greek equivalents (Pl. XVII, 21). A unique example bears an Etruscan inscription, and another, what seems to be a Roman name in Etruscan letters, but the great majority of the names, sometimes even those of resident Greeks, are in coarse, sprawling Roman letters, like those on the coinage of the period (Pl. XVII, 2, 10, 12), generally much abbreviated and abounding in the ligatured monograms so common on the consular denarii (Pl. XVIII, 18). The early O and ʘ, open at the bottom, and the A are not found or the ʌ which went out about 200 B. C., and the forms of the O, A and L go to prove that these name inscriptions did not begin before the second century. P, however, is P or P̄, which

continues through the Republican period. As for artists, there were evidently none of sufficient note for the owners to wish their names on these signets.

The second class of early Roman gems are those which show they were made under the Hellenic influence of the artists of Magna Græcia, many of whom doubtless gravitated to Rome with the demand for their work. While it is altogether impossible to distinguish some of these stones from purely Hellenistic work of the time, inscriptions and general characteristics help to place many as Roman. No Etruscan influence shows in them. By far the greatest number are strongly convex in shape, usually broad ovals approaching the circular, and they lack the border. Generally speaking they do not seem to date back as far as the earliest of the other group and probably the first of them should not be placed before the middle of the third century B.C. They continued steadily to increase in popularity as the others decreased, in the growth of Greek influence and Epicurean philosophy as opposed to the stoicism of early Roman ideals.

MATERIALS.—Dark sards, more easily attainable than the finer gems then popular in the East, were the favorite stones and some of these run almost into black. Gray chalcedonies and carnelian were not rare and occasional amethysts are found. Glass pastes were as common as in the other group, naturally imitating, as a rule, the dark sards, though violet, white, and other colors also occur.

TECHNIQUE.—Plastic effects, aided by the convexity which permitted deeper cutting, are in evidence in rounded forms standing out from the background. Figures and busts appear in full front (Pl. XVIII, 10, 15, 22, 24) with clever foreshortening, in the style of the best Hellenistic art. The technical work was generally much better than in the other class, though there were, of course, many poor specimens with coarse strokes and drill points standing together roughly and unjoined. Some even approach the drill-work Etruscan scarabs: largely animal pictures, with feet, joints, noses, etc. indicated by round borings, but they lack their dry severity.

The taste was for full, heavy forms, and the heads which are especially characteristic are generally unbearded and youthful, even when they represent older types. As a rule, they are neither fine nor beautiful, though, later, we find some that, while coarse in a way, are serious and thoughtfully conceived.

SUBJECTS.—As would be expected, there is a sharp line between the subjects affected by these Hellenizing Romans and by the adherents of the more sternly national party. Heroes and the epic cycles have little place here and the old cult pictures are lacking. Hēraklēs is the commonest, but he is shown as a type of triumphant might rather than as a serious creative hero. He is found strangling serpents, conquering giants or centaurs, wrestling with Antaios (See Pl. XXV, 19), capturing Cerberus, and attacking the river-god, Achelōos, while, in more frivolous vein he appears playing a lyre, drunken and even micturating (Pl. XVIII, 1). His head alone and that of Omphalē, who appears for the first time in this period, are also pictured.

Diomēdēs and Odysseus (Pl. XVIII, 2) are commonest of the Trojan War cycle and there is Kassandra with the Palladium (Pl. XVIII, 4) and Aineias (Æneas) carrying Anchisēs. Perseus, who was fabled in the Latin legend to have come ashore with Danaē in the chest, at Ardea in Latium, is shown with the head of Medousa and also as a bust wearing the dragon helmet of Hadēs which made its wearer invisible. Iphigeneia, Orestēs, and Marsyas also appear. Of Roman heroes we have Marcus Curtius (Pl. XVIII, 3), mounted and plunging into the chasm in the Forum.

Genre warrior types are not unusual: knights on horseback, sometimes contending with Gauls (Pl. XVIII, 6), one carrying away a maiden, perhaps a Sabine, and a Roman imperator with his legates. Hunters on foot or mounted are also pretty common and, of everyday people, shepherds (Pl. XVIII, 11), peasants, and fishermen, orators, bankers, athletes, charioteers, a lady with her slaves, a man who seems to be freezing, and philosophers reading, writing or teaching, a natural embodiment of Greek tastes becoming popular in Rome.

Of deities the tendency was all toward the cheerfulness of the cycles of Erōs and Bacchus (Pl. XVIII, 8). The former is now definitely the chubby Cupid of Hellenistic art, and his power is indicated by numerous pictures of him disarming, binding and even riding Hēraklēs, seated on the terrestrial globe, playing with the thunderbolt of Jupiter or with the rudder of Fortuna or holding a figure of Victory in his hand. He carries, also, bowls of fruit, bunches of grapes, wine jars and drinking cups, and is shown dancing, playing the lyre, hunting his way with a lantern, fishing or playing with animals, comic masks or even a hoop (Pl. XVIII, 9, 10). Busts with distended cheeks, a beaker and a wreath are characteristic. In a more serious way he is represented as reading a book, arming for battle, building a trophy or leaning, wearied, on his torch like the later figures of Thanatos (Compare Pl. XXIV, 6 and 9). The duel between Erōs and Anterōs is pictured, and the former is shown catching a butterfly or singeing it with his torch (Compare Pl. XXIX, 9), or bound and watched by a butterfly, perhaps Psychē. Often Aphroditē appears with him bending over, at her toilet, or naked; also Psychē. In short it would be impossible to say that any form of representation on the above lines was inconsistent with the spirit of this group of gems.

Bacchus is generally beardless and shown standing, sitting, or as a head or a Herm. Satyrs, often with the little horns given them by Hellenistic art, are very numerous. Some are dancing (Pl. XVIII, 7), and there are also mainads and a Seilēnos micturating. Not uncommonly there is found an obscene picture in these gems, a thing quite foreign to native Roman or the best Greek taste.

Of other gods, Athēna, is shown with many attributes as in Hellenistic art or seated on a bench with lion's feet as on the coins of Pergamos; Kubelē (Cybele) is seated on her lion, Artemis occurs and Juno with her peacock or sometimes a peacock head-dress. Here the bird is introduced merely as an attribute of the goddess and has no relation to its place in the Orphic cults. Isis appears in her Alexandrian types, marking

the growth of eastern religious ideas in Rome. These are the most usual. Erōs and the young Hermēs are sometimes shown as Herms.

Of minor deities the commonest are Victory, nude to the waist and writing on a shield or reading, Fortuna seated on a wheel, a rudder or a Capricornus, and the head of a horned river-god (Pl. XVIII, 24). Libya is found with an elephant's hide (Pl. XVIII, 23). Muses are rather common figures and the heavenly sphere is shown with them for the first time (Pl. XVIII, 5). Especially interesting is the combination of types and attributes, such as Fortuna with Artemis or with Nemesis, going back to early Greek ideas, and Victory with Isis (Pl. XVIII, 22), a later invention. Greater and lesser deities are also often represented by heads and busts alone (Pl. XVIII, 22—24).

There is a class of pictures that show a dwarf or gnome engaged in all sorts of employments, such as fishing, ploughing, playing the flute (Pl. XVIII, 19), carrying an amphora or sitting on one or on a bird. Probably these figures are not meant to be merely comic but represent some local demon, perhaps Campanian, a region of which several of the types seem characteristic (Compare Pl. XXVI, 29, which may be earlier than it is placed, and fall in this class). More definitely luck-bringing seals, akin to devices on many Carthaginian scarabs from Sardinia and to the later Roman grylli, are such mixed figures as a man's head and an eagle (Pl. XVIII, 17), an eagle with a man's body and legs, a man with wings and a goat's head, queer combinations of birds, which seem to begin along the second and first centuries, and of a man and an insect, an ass's head rising from a flower, a head with three legs (Pl. XVIII, 18), combined man and animal masks, and others of a more or less kindred character (Compare Pl. XIX, 17). An ant attacking a lion (Pl. XVIII, 14) may be purely humorous. On many of these certain symbols are added, such as caducii, cornucopias, etc. and it is very evident that they were believed to exert power as amulets. Altogether the spirit of grotesqueness is represented very fully and in many different forms.

Stones engraved only with symbols are also common. Some, such as the rudder of Fortuna, the club of Hēraklēs (Pl. XVIII, 12), the ear of wheat, and the caduceus were probably thought to be luck-bringing (See Pl. XIX, 7); others, like the drinking cup and the staff, the shoe (Pl. XVIII, 16), the helmet or weapons, may express the amusements or occupations of the wearers, while others may be purely ornamental like the sun-dial (Pl. XVIII, 20) and a fountain or birds in a garden. It is not a far cry, however, to put the sun-dial pictures in the symbolic class. Even street scenes, such as a man with a dancing donkey, are found.

Normal animal forms are common and are often very well done; running bulls, butting bulls, as on the coins of Thourioi, horses, dogs, goats, swine, roosters, lions, birds, insects, etc. (Pl. XVIII, 12, 13, 14).

A peculiarly characteristic line of gems of this class are drawn from the theatre. Furtwängler thinks some may show figures from the old Oscan buffooneries or Atellan farces, but it was from Greece that the legitimate stage finally established itself among the Romans, and these gems are, as a rule, distinctively Greek in their representations. Masks, both male and female (Pl. XVIII, 21), are much in evidence, and comedy seems to be favored rather than tragedy, both in the masks and in the figures. Especially there is the omnipresent slave of Plautus, with a fat belly and a short coat (Pl. XVIII, 15), either meditating some rascality, chained for his misdeeds, looking at a broken pitcher, running, taking refuge at an altar, quarreling, dancing or with an amphora or a lantern. Likewise we find the quarrelsome old man of the comedies. Sometimes the players appear with the masks pushed back or in their hands, and a mask that seems meant to have certain characteristics of a rooster probably indicated some lecherous character. It would be interesting to know whether M. Rostand was aware of this suggestion of his *Chanticleer* idea in early drama.

Last, among the great variety of subjects pictured on this class of gems we may first suspect the presence of lifelike

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portrait heads, in part rough and coarse, in part excellent though never so fine as are the Hellenistic or later Roman portraits (See Pl. XVIII, 25 and description).

INSCRIPTIONS.—Here, no more than on the gems of the Etruscan school, do we find any artists' names. Most of the inscriptions indicate the names of the owners (Pl. XVIII, 2, 7, 11, 12, 15, 18, 20), commonly much abbreviated or ligatured (Pl. XVIII, 18), usually in Latin but occasionally in Greek letters. Both run to coarse forms, unlike the dainty lettering on pure Greek stones. The Greek letters when used are apt to be the rounded types of the Hellenistic period such as C and E; the Latin P is usually open, and the L, with but one known exception, right-angled. Usually there is a dot at the end of each stroke and everything is paralleled in the Roman coinage of from 250 to 100 B. C. Unique examples show Etruscan or Oscan letters.

Returning to the general trend of early Roman gem-engraving, we find, in the last century before the Christian era the two above described classes blending into each other or, rather, the Greek influence prevailing. The severity of the old scarab style disappears, leaving only a stiffness which is now, probably, more the result of bad workmanship than of primitive taste. The figures are in a free background though the scarab border remains on some. Dionysos and Erōs finally drive out most of the hero sagas and the cult scenes. Nevertheless the materials used in the Etruscan group, the banded agate and sardonyx and other flat ring-stones, remained popular and their influence even prevailed over the convexity of the Hellenizing group, so that the dark sards, which were still very much in evidence, were often cut flat. The red jasper came into fashion at the end of the period, along with the nicolo, a novelty somewhat earlier. Stylistic and subjective kinship with the Roman coinage of the time helps to place many of these gems, such as Victory in a chariot, heads of Victory and of Diana, the winged Nemesis, as on the coins of Vibius Varro, the calmly classic Apollō type on those of Pomponius Musa, and the Neptune with Capricornus in his hand indicating the

turning point of the year. Especially favored was the hair treatment rolled up at the back and side in rough imitation of the Greek fifth century style (Pl. XIX, 1, 5, 8, 14).

Inscriptions also followed the coinage letterings, ligatures are common (Pl. XIX, 7, 11), the finishing dots begin to run out into little strokes (Pl. XIX, 21), and there are more Latin names done into Greek, though the Greek in Latin letters occur not uncommonly. All still refer to the owners, save an occasional sentiment (Pl. XIX, 7). No artists appear.

SUBJECTS.—In subjects there was an occasional tendency to revert to earlier Greek types such as the youthful *Erōs* (Pl. XIX, 5), and a goddess, probably *Aphroditē*, is shown rising out of a flower (Pl. XIX, 8). *Psychē* became much more popular and was pictured as a maiden with a bird's or a butterfly's wings (Pl. XIX, 3, 10); more rarely (Pl. XIX, 7) as a butterfly. She is shown being bound by or binding *Erōs*, pierced by his arrow or before an altar with torch and patera. Sometimes she is combined with *Nemesis*, as expressed by the characteristic bent arm gesture (Pl. XIX, 3), and, again, with *Victory* or with *Peace*. Herm busts of *Psychē* are also in evidence (Pl. XIX, 14). A characteristic attitude of both *Victory* and *Nemesis* is that of rising on the toes, as shown in the *Erōs* figure (Pl. XIX, 5), sometimes with a bough held out in one hand. *Dionysos*, nymphs, *Bacchantes*, satyrs and *Seilēni* appear in a great variety of poses (Pl. XIX, 1), the first usually as a sturdy, bearded figure (See Pl. XVIII, 8; XXII, 2). *Priapos* is a favorite, though evidently not often chosen in a spirit of obscenity but, rather, as a conception of creative power. One gem shows him as a *Herm* with a peacock and a butterfly, another, rising out of a flower, and *Erōs* is pictured making offering to him. The half-naked *Aphroditē*, often the back view of her, is also found. The pictures of a woman with a swan may be either *Aphroditē* or *Lēda* (Pl. XIX, 13). The figure of *Methē* was worn as a guard against drunkenness.

A bearded *Herm* with butterfly's wings, probably *Hypnos* (Pl. XIX, 19), is a typical subject of this epoch. *Erōs* (Pl. XIX, 5), of course, continues first of all in popularity. *Mars*,

Neptune (Pl. XIX, 16) and other single figures of gods in many characteristic attitudes are common as they are even more so later. Many attributes are usually added to make clear their identity, though these are sometimes combined in a way that is rather confusing. A figure of what may be a genius with a caduceus, cornucopia, sword, globe, etc., is an example of this tendency (Pl. XIX, 4). Really good conception, taken together with stiff, angular treatment, is often the only way of distinguishing these from the later productions, for stiff, angular treatment on poor work is always in evidence. Many types now got the permanent form they continued to appear in. Pantheistic figures emblematic of Rome's increasing power and growing World-government, such, perhaps, as that of the "genius" just referred to, naturally became favorites.

Paintings were doubtless more common now and some gems show evidence of being taken from figures in them (Pl. XIX, Fig. 1).

Representations of philosophers, students and the like increase greatly in number. They are found meditating, reading, writing, sometimes with a Herm (Pl. XIX, 20) or a sundial. A death's-head pictured with a philosopher shows him thinking about death, a butterfly, about immortality, and so on. Many death's-heads and skeletons (Pl. XIX, 9; See XXVI, 9) indicate the extremes of a tendency to gloomy reflections which is not altogether incongruous with that same Epicureanism that gave birth to the many Erotic and Bacchic pictures. Wheels and pendulums were only less gruesome symbols of the transitoriness of life. Where in the earlier gems under Etruscan influence there is evidenced deep religious feeling and a belief in immortality, now we find few cult manifestations but only the desire for pleasure alternating with depression, and the trivial hope to gain good luck in life by the aid of the symbols supposed to invoke it. Horns of plenty, rudders, caducii, thyrsi, ears of wheat, palm branches and clubs (Pl. XIX, 7, 11, 12) are the commonest of these: also there are more animal pictures, especially of the animals favored by special gods (Pl. XIX, 2, 12, 19), and an increasing number

of grotesques among which a cicada or cricket engaged in various human employments is especially characteristic (Pl. XIX, 15). Possibly its resemblance to a skeleton may have suggested this caprice as humorous, but the symbols it sometimes carries, its frequency, and the spirit of the age make us suspect rather some especial significance in the direction of fortune-bringing. Finally there are all sorts of utensils, vases, fountains, ships and armor, especially helmets (Pl. XIX, 18), often fantastically contrived with animal forms. Bust pictures of war-horses' heads in magic-working combinations are also found (Pl. XIX, 17).

There is practically but one of the serious cult scenes that Furtwängler places especially in this epoch. It is frequently repeated on the gems and represents a maiden sleeping, just waking or peacefully waiting. She is either sitting bent forward or half reclining and sometimes her mantle is drawn over the back of her head. In some cases she is alone, in others one or two men approach, and a serpent is shown twisting around a tree. Beside her is a round object like a basket in which are small things that may be intended for loaves of bread and over which her left arm is sometimes stretched, or she may be shown seated on it. Often there is added a pitcher or vase. A tree, like a laurel, grows near and, also, ears of wheat. Ants seem to be approaching her and above hovers a bird which sometimes bears a staff, a thyrsus or a wreath. Dr. Furtwängler makes a very interesting identification of the subject of these gems with the incident of the revival of the cult of Juno Sospita at Lanuvium, which had fallen into decay about 90 B. C. This revival was the result of a warning that came to Rome in the dream of a woman, a Cæcilia of the family of the Metelli, surely akin to her whose tomb now stands on the Appian Way, if it be not indeed the same. The temple was near a grove where had been found the lair of a serpent sacred to the goddess. Crows were her sacred birds. The cult ceremony consisted in leading into the grove a young woman consecrated to Juno, her eyes bound and a cake in her hand. If she was pure the serpent would eat the cake. If she was

impure, ants came and broke and carried it away. In the former event the people believed that the year would be fertile (Pl. XIX, 6).

In closing this epoch it is to be noted in connection with the numerous heads of deities pictured, that toward its end the portraiture on gems made tremendous strides toward perfection (Pl. XIX, 21, 22). We have excellent likenesses of Pompeius Magnus (Pl. XIX, 21), Cæsar and Marcus Antonius that show the ultimate triumph of Hellenistic art. Early Roman roughness disappears, and there comes to be a distinct Italian style which, from its combination of Greek workmanship with Roman developments and Roman or World-wide subjects, may be called Græco-Roman.

CHAPTER VII

GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE

FROM this time on must be dated the great majority of stones that come into our hands today, and, also, it becomes extremely difficult, in some cases impossible, to distinguish many of them from earlier Hellenistic work. All sorts of archaizing tendencies prevailed and the taste of the individual, the skill of the artists and the perfection of their tools made everything possible. From the days of Pompey and Cæsar and the final conquest of the East, fuller knowledge of the beauty of Greek gems, the growing craze for Greek art and the appreciation of Greek learning, led, not only to a wellnigh universal use of gem signets, good, bad and indifferent, but also to a collecting mania that may well have resulted in ancient forgeries of still earlier work which might be extremely interesting were we able now to identify them with any certainty. Pompey's dedication of Mithridatēs' collection in the Capitol, and the six collections dedicated by Julius Cæsar in the temple of Venus Victrix voice the taste. It has been too much the fashion to assume, in view of the better taste of earlier times, that the finest gems are all Hellenistic and the mass of poorer cuttings all Imperial. The dictum is doubtless true as to most of the latter, but, as I have said before, there must always have been more bad workmen than artists, and poorer people who aspired or had need to follow the fashions of the rich. Therefore, badly cut stones, where the material and subject comply with the taste and fashion of an earlier date, must not be hailed too positively as Imperial. On the other hand the really good engraving of the numerous Greek artists whom the wealth of Rome and the demand for their work there attracted to the

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Capital of the World was, generally speaking, quite equal to the products of the best Hellenistic art, while its quantity was much greater. The reproduction of earlier subjects and the affectation of earlier styles go to make the matter still more complex. To sum it all up, the moral is that, while combinations of material, subject and method lead us to satisfactory attributions in the majority of instances, the student and connoisseur must not generalize too liberally and must guard against hard and fast theories that would apply the dogmatic yard-stick as the final measure of all things.

One reason why our supply of ancient gems of later epochs is in greater proportion than the relative product of the earlier periods is found in the enormous increase of ring wearing among the Romans. In Republican times it was considered effeminate to wear more than the needful signet. In Horace's day to sport three rings on the left hand marked the finished exquisite, but in Martial's his fop wears half a dozen on each finger, and Quintilian cautions orators against overloading the hand with rings. On the practical side too, Pliny (Bk. XXXIII, 6) dilates on the increased necessity of sealing up everything from the horde of thievish slaves and he comments on the ring worn to seal up the cabinet which held the signet ring proper, the latter being too valuable a thing to be worn abroad with the attendant risk of loss. Still further he speaks of the lower orders of citizens "slipping off the ring the moment a simple contract is made," a suggestive sentence as to the widespread practice of signet wearing and the constant use of the signet even by persons of little consequence. A point, too, to be considered from the standpoint of probability of discovery is that most of the art of earlier ages lies deeper in the debris of antiquity—further underground—than does that of the later, and the surface scratchings of peasants, workmen, and even archæologists which have produced many of our present possessions have left the gems of older days undisturbed, let us hope, for future chances and more systematic excavation. With these qualifications and warnings in mind we may take up the considerations that must govern us in accomplishing the much

that can be accomplished in the lines of study and illumination.

MATERIALS.—We now find, practically, every known stone obtainable and in use. The best work is apt to appear on garnet, aquamarine, beryl, topaz, peridot and, very rarely, emerald and sapphire. The commonest material was a translucent carnelian from the East. Darker sard and chalcedony were still in vogue, also amethyst. Rock-crystal was rare. Agate had largely gone out of fashion but the sardonyx was still popular cut in a new way, not across the layers but parallel with them, and the gem was fashioned in the shape of a truncated cone in order best to display the different colors on the sides of the stone rising from the bezel of the ring. The picture was, of course, cut in the smaller layer at the top.

Another specific development of the period, though not an absolute novelty, was the green plasma, always more or less convex in form and bearing, for the most part, a single figure of some deity or a copy of a statue. It became a definite gem class in the first century B. C., about the time of Julius Cæsar. A third fashionable stone, whose evolution has been noted somewhat earlier and which had increased so rapidly in popularity as to augur some supposed magical influence in it, was the *Ægyptilla*, an agate of two layers, generally a black or dark brown and a grayish blue, the intaglio being cut through the light layer into the dark, the former also being usually cut away around the edges so as to leave a darker border. This gem thus engraved is known as the *nicolo*. On it, too, single figures and famous statue types were the popular subjects. Red jasper, also, unused except occasionally in the older Greek period, had begun again in the combination epoch and now became characteristic, remaining so through the Empire. *Aspasios*, one of the best artists, used a peculiar bright red variety, and wonderful work is found on it. Green jasper also reappeared, and, as the period advanced, two new materials came into use, yellow jasper and *heliotrope* or bloodstone.

Book XXXVII of the *Natural History* of Pliny the Elder, written in the early part of the first century A. D., on the precious stones of the period together with their medical and

magical properties, furnishes most interesting reading for the student of the subject. Color was pretty much the only test of kind, and, in many instances, it is extremely difficult to identify his names and descriptions with stones as we know them to-day.

Glass pastes, though beginning to fall off in numbers, were still common throughout this epoch, especially in Italy during Augustan times, and some are so large that they could not have been meant for signets. Usually they are transparent white, light blue, yellow, brown, green and violet, and bear nearly always copies of the best gem pictures, especially those from the Erotic and Bacchic cycles. Later, poorer purchasers seemed rather to prefer a stone, however cheaply cut, to a fine paste, a sure sign of the coming decay of art interest. Seals cut in metal practically went out of use.

TECHNIQUE.—In the matter of technique the good gem engraving of the early Empire was practically as Greek as was the Hellenistic. The bad might well be anything and the tendencies were alike over all the Roman World, better, of course, in the great centers of culture like Rome, Athens, Alexandria, etc., poorer in more backward or decadent districts. The lords of the World began by having their portraits cut by Greek artists, and the other signet subjects of the wealthy followed naturally. Generally speaking, convex garnets with single figures cut sketchily with long lines seem to have been especially popular in the East, and glass pastes were much less common there than in Italy before, say 50 A. D., when the manufacture at Rome began to flag. The favorite figures on these garnets were, first Tychē, then Dēmēter with her torches, Nemesis, Athēna, Apollō, and an unknown goddess with sceptre and bowl; also animals, masks and symbols. The Nemesis (Pl. XXV, 4), though done on a sardonyx, is a good example of this style.

As at an earlier time, the more translucent stones were apt to be more or less convex, either on both sides or, at least, on the picture one; the opaque stones were flat or nearly so. Practically all are ring-stones with the exception of rare pierced

four-sided pendants engraved on all four sides, a single example of a five-sided pendant, a probably unique cylinder, and a few large intaglios that must have been made for ornaments rather than signets. The oval, as the tendency in the Hellenizing Roman group foreshadows, inclines more to broadness than does the Hellenistic and occasionally there is an approach to the four-cornered shape noted in the Roman gems under Etruscan influence. In these, as before, the milled border was usually preserved. Otherwise it is very rare.

Tools and technical skill were, as I have said, at their best, and the only noticeable falling away of the best Augustan from even the best Greek examples was in inspiration, softness, tenderness and bold freshness. Here everything was neat, sharp, definite and inclined to be dry. Delicacy was carried to a higher point than at any other time. There was the Hellenistic fondness for very fine parallel lines, especially in delineating hair, and a preference for foreshortened oblique views of animals (Pl. XXVI, 19, 21), also Hellenistic, and which served to display the artists' skill. It is something very like this that we find in the latter part of the Italian Renaissance, beginning even with Michael Angelo and running riot in Bernini: a consciousness on the part of the craftsman of his ability to do difficult things and a desire to show off, than which there is no surer sign of the decay of true taste. Floating drapery was charmingly rendered as was also the transparent. The poorer work generally tried to copy the best and, in so doing, graded down from what may be called sketchy to frankly crude. Even when the great artists of the period copied famous old gems they, doubtless, substituted their own precision for the ancient breadth of handling, artistlike considering *their* art the greater. After the fall of the Claudian princes we find a decadence setting in, which had its climax in the Flavian principiates. Internal disturbances, civil wars, and the accession of a family who were primarily rough soldiers, all had their influence. Under Hadrian there was a distinct revival of Greek taste and artistic luxury but it was the last real flash of the flame, and by 150 A. D. had begun the final decay that

progressed from then on with practically no interruption. The sale of Hadrian's cabinet of gems by the philosopher, Marcus Aurelius, in order to replenish his military chest for the war against the Marcomanni, which Capitolinus tells of, is a suggestive incident.

SUBJECTS.—It is now that we find nearly every gem subject in evidence. There were preferences, of course, but nothing was neglected, and comparatively few specimens can be denied to this epoch on the score of their motives. Primarily the controlling ideas were art pure and simple, flattery of the great, and superstition as opposed to the higher religious thought, as is evidenced in the great number of magic-working and luck-bringing symbols and the craze for the mystic eastern cults.

Of the older gods the child Erōs prevailed in endlessly varied pictures, for the most part sportive and frivolous (Pl. XXI, 3; XXIII, 8; XXIV, 1—3, 6—8). Often he is shown together with Psychē. The reclining Hermaphrodite was a favorite, and there were many charming female figures of the type of the Aphroditē Kallipygē, the bathing Artemis (Pl. XXIV, 18), Nērēids (Pl. XXII, 5, 10), Muses (Pl. XXVII, 16), mainads (Pl. XXI, 20), Hōrai, etc. Victory (Pl. XXIV, 14, 15) and Fortuna (Pl. XXV, 9) were, of course, very common. Hypnos is not rare (Pl. XXIV, 17). Dionysos (Pl. XXII, 2; XXIII, 5), satyrs and Tritōns (Pl. XXII, 10; XXVI, 3), Hēraklēs—or, as we should, perhaps, write it now, Hercules—(Pl. XX, 7; XXV, 7, 19; XXVII, 11, 17), often according to the youthful type shown by Praxitelēs, and many classical subjects, including the Seilēnos type of the fifth century B. C., all abound. None of the gods is lacking. The Venus Victrix (Pl. XXIII, 21; XXIV, 12) was an especially favored subject in compliment to Cæsar whose patroness she was and who wore her on his signet. Mars Ultor (Pl. XXIII, 23) and Mars Gradivus (Pl. XXIII, 22) were common, Mars Navalis with a Victory in his hand and his foot on a ship (Pl. XXIII, 24) suggests Augustus' triumph at Actium, while many more or less crude Minervas may be referred to Flavian times as being representations of

the favored and favoring deity of that house. The good fortune of the emperor as well as his more tangible favor invoked by the flattery was thus sought for.

At this time, too, we find in the *Fortuna Pantheia*, or *Fortuna* invested with the attributes of other divinities, a Roman manifestation of pantheistic tendencies (See Furtwängler, Pl. XLIV, 68). Lucian has left us an account of a similar but, doubtless, earlier development in the East: the "Syrian goddess" of Emesa who, whether Juno, Isis or Nature as variously named, united the attributes of Pallas, Venus Urania, Artemis, Rhea, Nemesis and the Fates (With the lotus flower of Isis, Pl. XXIII, 17). She was enthroned with or upon lions, wore a radiated or turreted crown and the cestus and bore the distaff and sceptre. Jupiter Belus, her male type, was throned on bulls.

Sculpture and painting furnished the models for numerous engravings on the gems. Most of the pictures of gods seem to be copied from specific statues, occasionally with a pedestal included, and an endless repetition of types and poses, ranging all the way from the best work to the worst, was the result. To name a few of the famous sculpture types, there is the Hercules of the severe school (Shown by Furtwängler, Pl. XLIII, 35, 37) as well as both the Pheidian (Furtwängler, Pl. XXXIX, 20) and the Praxitelian (Pl. XXV, 7), the Apollō of Kanachos, with a deer (Pl. XXIII, 4), the Sauroktonos of Praxitelēs (Pl. XXIII, 3), and, also, standing beside a column (Pl. XXII, 4), Zeus (Pl. XXIII, 11, 12, 19), Hermēs (Pl. XX, 2; XXIII, 14—16), Neptune (Pl. XXIII, 20), Athēna (Pl. XXIII, 25), and the Athēna Parthenos of Pheidias (Bust, Pl. XX, 9). Also the Athēna Promachos and the Athēna of Lemnos are shown in busts. The Ephesian Artemis is common (Pl. XXIII, 26). The Amazon of Krēsilas is copied both in full figure and in bust (Pl. XXI, 18), but especially in favor were the works of Polykleitos, notably the Doryphoros (Pl. XXV, 12) and the Diadoumenos. The Thēseus (Pl. XX, 14) is thoroughly Polykleitan, as is the Pan (?) (Pl. XXI, 21). The Triptolemos type, which goes back to Euphranor and was

regarded by the Romans as a *Bonus Eventus* and, hence, especially propitious, was a great favorite and continued so far down in glyptic art (Pl. XXIV, 20, 21). The *Discobolus* of Myrōn was copied (Pl. XXV, 11 is a variant of the theme quite in the style of that sculptor) and, perhaps, his *Perseus*; also the archer *Cupid* of Lysippos (See Pl. XXIII, 8). The athlete (Pl. XX, 4), the *Hypnos* (Pl. XXV, 5), and the winged figure (Pl. XXV, 6) are also probably copies of statues. A certain line of archaic work delicately overdone seems to follow *Kallimachos* (Pl. XXIV, 16). Greek statues were naturally the most popular but there are a few Roman ones such as the Augustan *Mars Ultor* (Pl. XXIII, 23) and the *Spes* (Pl. XXV, 10). Busts and heads of divinities were, of course, common (Pl. XX, 1, 3, 8, 9, 13; XXI, 1, 4, 14, 16, 17, 19; XXII, 1, 9, 13; XXIV, 5).

For the general rendering of subjects from all sources they even went back to the wounded hero groups in the Etruscanizing Roman gems (Pl. XXV, 17), and the hero cycles were popular sources of inspiration (Pl. XX, 5, 7, 14, 15; XXV, 1, 7, 8, 14, 19, 20; XXVII, 11, 15). From paintings, also, many ideas seem to be taken, though here our attributions are necessarily more speculative and but one or two figures could usually be shown on a gem. Still, judging from the ancient writers, there is every probability that we have many famous paintings or parts of them preserved to us glyptically. The *Victory* driving a four-horse chariot of *Nichomachos* may be one of these and the *Mēdeia* and the *Ajax* of *Timomachos* (Pl. XXV, 1), others. Both the last named paintings treated the motive of brooding madness. *Ajax* was a well known figure in Etruscan and Roman art, but the *Mēdeia* first appeared after *Cæsar* purchased *Timomachos*' two works and hung them in the temple of *Venus Genetrix*. Many pictures of the lamenting *Kassandra* and of *Achilleus* sulking in his tent (Pl. XXV, 14) or playing the lyre (Pl. XX, 15) may be from paintings, and engravings of *Promētheus*, an athlete (Pl. XXV, 13), of *Orestēs* killing *Klytāimnēstra*, and of the theft of the *Palladium* (Pl. XX, 5) may be copied respectively from the World-famous works of

Parrhasios, Eupompos, Theōn and Polygnōtos. The Hercules carrying a bull (Pl. XX, 7), the Nikē sacrificing a bull (Pl. XX, 12), and many of the Cupid conceits seem inspired from such a source, and certain pictures of the gods, especially Athēna, Zeus and Arēs, contending with snake-legged giants (Pl. XXIII, 13), the Trojan horse scene on a glass paste, and a Ploutō or Serapis enthroned between the Dioskoroi. To later Alexandrian paintings may probably be referred certain type pictures of Aphroditē playing with Erōs (Pl. XX, 10), Artemis and Actaiōn (Pl. XXIV, 18), Narkissos, Ganymēdēs, Hermēs (Pl. XXII, 12), Marsyas (Pl. XXIV, 13), Hēlios, Aphroditē riding a sea-monster (Pl. XXII, 5), and the Tritōn and Nērēid (Pl. XXII, 10). The vase painters, too, supplied many motives.

As showing the art feeling of the period, the favorite motive of the Medousa head was seldom engraved as the hideous awe-inspiring type of earlier times but as that of a beautiful maiden, stern, often with wings on her head, and evidencing her identity only by the serpents in her hair (Pl. XX, 8; XXI, 4; XXII, 1).

All sorts of representations of everyday life and occupations, and, especially, rural scenes, seem to be inspired by purely artistic feeling, though many of the occupation motives doubtless suggested the calling of the wearer, and the numerous pictures of almost every known animal or of their heads, as well as the sphinxes and griffins, may be assigned either to the art or to the protecting deity motive (Pl. XXVI, 4, 7, 14, 19, 21, 23—25, 27).

A large class of gems show an eagle, often on an altar between two standards or some variant of the idea, and were, doubtless, the signets of soldiers who sought thus to signalize their calling which, under the Empire, became a distinct profession. I have even found scratched on one—evidently not by the gem-engraver—what appears to be the number of a legion (Pl. XXVII, 6) and, bearing in mind the fact that each legion bore, as it were, some heraldic device, where such occurs with a standard or any symbol denoting the soldier we may often assume to what command the owner belonged. Known legionary cognizances are the following: I (Adjutrix), Capricorn,

Pēgasos; I (Italica), Boar, Bull; I (Minerva), Ram; II (Adjutrix), Boar, Pēgasos; II (Augusta), Capricorn, Pēgasos (?); II (Italica), She-wolf and twins, Capricorn; II (Parthica), Centaur; II (Trajana), Hercules; III (Gallica), Bull; III (Italica), Stork; IV (Flavia), Lion; IV (Macedonica), Bull, Capricorn; V (Alaudæ), perhaps originally a lark but, by special authorization of Cæsar, on account of their success against the elephants of Juba, they bore an elephant on their standards; V (Macedonica), Bull; VI (Victrix), Bull; VII (Claudia), Bull; VIII (Augusta), Bull; X (Fretensis), Bull, Boar, Galley; X (Gemina), Bull; XI (Claudia), Neptune; XIII (Gemina), Lion; XIV (Gemina, Martia, Victrix), Capricorn; XX (Valeria Victrix), Boar; XXI (Rapax), Capricorn; XXII (Primigenia), Capricorn; XXX (Ulpia), Neptune, Capricorn. (See the gem figured Pl. XXVI, 12.)

From the frequency of zodiacal signs among these insignia and the repetition of the same sign, it has been inferred that the device referred to the month when and, hence, the heavenly auspices under which the legion was organized. It is also claimed that the bull cognizance means that the legion was formed by Julius Cæsar, because Venus, the protectress of the Julian house, usually presides over the sign, Taurus. Capricorn may thus indicate a legion organized by Augustus, and Minerva or the ram, one formed by Domitian. Possible reorganizations or special permissions to place themselves under imperial auspices may also be evidenced. Students may be referred to the *Notitia Imperii* for other (fifth century) information on this subject, especially as to the special insignia of the cohorts under the Late Empire.

Pictures of animals in incongruous occupations may be either charms or merely humorous conceptions. There are dogs, mice and other creatures driving chariots to which roosters are yoked (Pl. XXVII, 9), cranes playing musical instruments (Pl. XXVI, 27) and other kindred grotesque conceptions.

The portrait heads (Pl. XX, 6, 11; XXI, 2, 5—8), of which there are very many, were either personal or complimentary in their significance. The Greek philosophers, poets and orators

were much favored in this line and we have at least what passed for the lineaments of Sōkratēs (Pl. XXI, 7), Epikouros, Diogenēs, Antisthenēs, Aristotelēs, Homēr and Dēmostenēs. Among portraits of famous Romans are the Sextus Pompeius of Agathangelos (Pl. XX, 6), Junius Brutus, doubtless carried as the signet of some mourner for the old Republican days, several possible Ciceros, the Julia, daughter of Titus, by Evodos (Pl. XX, 11), and, of course, endless portraits of the emperors, easily identified and, unfortunately, as easily copied, from the fine likenesses on the bronze coins of the early Empire. A deeper reason than mere compliment existed, as I have suggested, for wearing the emperor's portrait, since, by so doing, the wearer sought to invoke to his aid the "Fortune" of the prince, just as the Japanese have attributed victories to the "Virtues of the Mikado" and, in this connection, also, may be noted the spirit of vanity or adulation involved in the frequent representation of rulers in the guise of some deity. Alexander's pose as Zeus (Pl. XIV, 1) is, probably, the earliest but throughout Roman times we find the constantly increasing tendency. Empresses were pictured as Isis, Ceres, Cybele, Diana, etc., and the emperors figured mostly as Ammon or Serapis.

That there lurked danger, however, in this custom of wearing likenesses of the great, is evidenced by the fact that, under Tiberius, certain persons were executed for sacrilege for visiting brothels while wearing rings set with the portrait of the deified Augustus. The quality of the portrait work begins to fall off after Augustus' time.

The theatre, too, is much in evidence in the figures and masks (Pl. XXI, 9, 10; XXII, 6, 7) drawn generally from the later Attic comedy, and the sports of the circus, which grew constantly in favor and, later, became a craze that overturned emperors, were signalized by pictures of favorite chariot teams and famous horses (Pl. XXVI, 22; XXVII, 13), often with the name added. The circus scene (Pl. XXII, 3) is especially interesting in this connection. The ingenious combinations of several masks in one head (Pl. XXI, 13) are connected rather with the amulets and talismans which we shall consider later.

Especially numerous now on gems are weapons, armor, ships (Pl. XXVI, 1, 2), vases (Pl. XXV, 22, 23), and, above all, luck-bringing symbols, heads, and animals (Pl. XXVI, 4, 14, 16, 20, 28, 30), often astronomical (Pl. XXVI, 15; XXVII, 7, 8; XXIX, 1, 4, 10). Capricornus is most often found (Pl. XXVI, 15; XXIX, 4, 10). Leo is common and may be distinguished from purely animal pictures of lions by the star or stars in the field (Pl. XXI, 11). It is not always easy, however, to tell it from the later Mithraic lions pictured as typifying the Sun (See Pl. XXIX, 14, 23). Cancer (Pl. XXVII, 7), also, is not uncommon, sometimes with a face pictured on the shell. Pisces occurs, as does Gemini (Pl. XXIX, 1), Virgo, to be distinguished from Victory by her wheat sheaf and helmet, and most if not all of the rest. I have one gem on which are found both Libra and Scorpio (Pl. XXVII, 8), probably the signet of one whose birth fell at the juncture of the signs and who sought the influence of both. Three signs together seem to indicate some sort of recognition of the doctrine of trines. According to Manilius there was a tutelary relation between certain deities and the Zodiac, as Minerva with Aries, Venus with Taurus, Apollō with Gemini, Hermēs with Cancer, Jove and Cybele with Leo, Arēs with Virgo, Vulcan with Libra, Mars with Scorpio, Diana with Sagittarius, Vesta with Capricorn, Neptune with Pisces and Juno with Aquarius. The reason for the connection is obvious in several of these. Firmicus also lays down the varying powers of certain astral deities in connection with certain signs; all of which will explain the occurrence of gods together with zodiacal symbols sometimes other than of their own houses. Day and night, too, seem to have varied the influences; in short it may be possible to illumine and illustrate by gems much of the abstruse and involved astrological superstition of early times. As illustrative of the supposed power of astronomical gems, it was told that when Apollonius of Tyana visited the Brahman, Iarchus, his host presented him with seven rings, each named for a planet and to be worn on its proper day, with the result that the philosopher preserved his vigor and good looks beyond

his hundredth year. In the matter of close dating we may safely place many of the Capricornus gems in the principate of Augustus whose birth sign it was, and, likewise, those of Scorpio in the reign of Tiberius—these for the joint reasons that prompted the wide adoption of the Venus Victrix and the Flavian Minerva as gem devices. Early in the Empire good fortune seems to have been most easily invoked by ears of wheat, horns of plenty, rudders, palm branches and the attributes and sacred animals of the different gods. Often the symbol was pictured held in a hand (Pl. XXIX, 5) and clasped hands holding a wheat ear was an emblem of marriage by the ceremony of the *confarreatio* (Pl. XXVII, 10; XXVIII, 16). Later, these signs were displaced to a large extent by the fantastic *symplegmata* or *grylli* combinations of which I have spoken above and which seem to have had an eastern origin. I would prefer the name *symplegmata* to that of *grylli* (crickets) by which they are commonly known and which was probably derived from the man-cricket pictures referred to above and which still remained popular, because, while the insect is sometimes a feature in these figures, I think there is good reason to believe that the bases of the two ideas are quite distinct. Still, "*grylli*" is the more generally accepted name and I shall use it for that reason. It is probable that the zodiacal element may have been at the bottom of these *symplegmata* or, perhaps, some of the mystic cosmogonies. For instance, the Orphic cult held that water and earth were the first principles of creation and that from their union sprang a being having the body of a serpent with the heads of a man, a bull and a lion. This being, named *Hēraklēs* or *Chronos*, laid an egg out of which came the first-born god, *Phanēs*, and from the halves of the shell were formed Heaven and Earth.

Whatever their origin, however, there is little doubt that it was unknown or lost sight of by the numerous wearers whose thought is probably best voiced by Plutarch where he says: "The objects that are fastened up as a means to keep off witchcraft derive their efficacy from the fact that they act through the strangeness and ridiculousness of their forms which fix the

mischief-making evil eye upon themselves," a fancy of the vitality of which we find abundant evidence in the amulets worn by the lower class of modern Italians. The lack of imagination in the designing of these latter is typical of the artistic fall of the race.

Coming to their composition, the *Seilēnos* (*Besa?*) mask, itself a powerful amulet, seems to be the central idea of many; this for the breast, with head, tail and legs of peacocks, roosters, cranes, horses, rams or elephants grouped around it in all manner of weird combinations. Palm branches, ears of wheat, horns of plenty, dolphins and sea-horses—all luck-bringing in themselves and, doubtless, considered much more so in combination—were added and worked into the designs, often with considerable ingenuity. The Greek *Hippoelectryon* or horse-rooster, probably derived from Carthage, was another popular central motive; also the foreparts of lions or elephants coming out of snail shells, and every manner of absurdity in the way of mask, animal and symbol combination (Pl. XXI, 12, 15; XXVI, 6—8, 13; XXVII, 2—5).

With the Hadrianic revival we find, in view of that emperor's interest in astrology and the cults of Egypt, an increase in the number of gems that owe their origin to such sources. Also Egyptian deities often appear on Roman signets, frequently with attributes of Greek or Roman gods, such as the jackal-headed *Anubis* with the palm branch of *Victory* and the caduceus of *Hermēs*, his psychopompic office leading naturally to his identification with the latter god (See also the figure, Pl. XXVI, 5). Princesses had their portraits cut with attributes of *Isis*, such as the lotos flower; and the child, *Horus*, the *Harpokratēs* of the Greeks, appears very commonly as a god of silence with his finger at his lips and a cornucopia, especially throughout the eastern provinces of the Empire (Pl. XXI, 11). Most common of all, especially in bust representations, is *Jupiter Serapis*, indicated by the *modius* or corn measure on his head, as the lord of the subterranean world and its treasures, his influence as a corn-god and over the fortunes of the future life or death being recognized, as was that of

Hermēs, down to the end of paganism, as the dispenser of riches to be won by commerce and trade (Pl. XXI, 17; XXII, 9).

The Gnostic superstitions and the talismans and amulets born of them had their origin during this epoch but it seems to me better to treat them under the next when the number of such gems increased so enormously as practically to drive out most of the earlier superstitions.

INSCRIPTIONS.—The majority of these still refer to owners' names (Pl. XXV, 9, 17, 18; XXVI, 4, 20; XXVII, 1). Furtwängler's apparent statement to the contrary probably refers rather to gems of the better class upon which we find a much larger number of artists' signatures than at any other time. Where the owner's name appears with a fine intaglio it is apt to be in Greek lettering or indicated by an initial rather than a coarse Latin ligature. Occasionally, too, a motto or sentiment of some kind may be dated here and, very rarely, a descriptive legend. The letters, ANTI, on a large broken portrait head of Antinoüs do not fall under ring-stone strictures, while the MARS VLTOR beside an evident copy of the statue of the god in the Augustan temple may, perhaps, be explained by the eagerness of the owner to identify his representation. Also we find a MAR VIC (to Mars Victor) with a picture of a youth, perhaps a genius, offering a figure of Victory to a statue of Mars, and a Venus Victrix with her name in both Greek and Latin. Gift and votive inscriptions, various good wishes to beloved persons and amorous legends also occur both now and later. It is, however, the artists' signatures which, from the standpoint of interest, are by far the most important inscriptions on these gems.

ARTISTS.—Among them we may provisionally place Sōsoklēs as the earliest, from a beautiful Medousa head with wings, signed, CWCOEAE, in flowing Hellenistic script (Pl. XXI, 4); then Solōn, who seems, however, to have worked rather longer and to have been a contemporary of Dioskouridēs, with his Diomēdēs stealing the Palladium, signed, COΛWN EΠOIEI, his Medousa head, signed, ΞΟΛΩΝΟΕ, (Pl. XX, 8), which, by the by, has been pretty strongly doubted, and a violet paste copy of one

of his works: a nymph's head and breast with panther skin thrown around her. She carries a rod or thyrsus and the lettering reads, $\text{CO}\Lambda\Omega\text{N}$. Also there is a Hercules signed, $\text{CO}\Lambda\Omega\text{NOC}$. Apollōnios, whose Artemis is signed, $\text{A}\Pi\text{O}\Lambda\Lambda\Omega\text{N}\text{I}\text{O}\Upsilon$, seems also to be one of the earlier artists. Foremost among the gem-cutters of the Augustan Age stands Dioskouridēs, who cut the portrait of Augustus himself. This gem has remained undiscovered though Reinach claims that a head of the Emperor on a carnelian is the work of this master as, also, an amethyst portrait of Mæcenās. We have certainly, however, several others: a Diomēdēs, signed, $\Delta\text{I}\text{O}\text{C}\text{K}\text{O}\Upsilon\text{P}\text{I}\Delta\text{O}\Upsilon$ (Pl. XX, 5), two Hermēs (Pl. XX, 2), a beautiful female head and a portrait bust of Dēmōsthenēs. On all of these the signature is the same with the exception of variations in the style of lettering, particularly on one of the Hermēs ($\Delta\text{I}\text{O}\text{C}\text{I}\text{:O}\Upsilon\text{I}\text{:I}\Delta\text{O}\Upsilon$). Dioskouridēs cannot be said to have been an originator of ideas as, in fact, were few if any of his contemporaries. He was a tasteful classicist, borrowing his subjects from the best examples of an older art but treating them in his own way. He seems to have come to Rome from Aigeai in Kilikia with his three sons, Eutykhēs, Hyllos, and Hērophilos, all of whom followed his craft and have left us examples of their work. Of the first we have the head and upper part of the body of an Athēna which bears, in four lines, the unusually detailed signatory inscription, $\text{E}\Upsilon\text{T}\Upsilon\text{X}\text{H}\text{C}\ \Delta\text{I}\text{O}\text{C}\text{K}\text{O}\Upsilon\text{P}\text{I}\Delta\text{O}\Upsilon\ \text{A}\text{I}\Gamma\text{E}\text{A}\text{I}\text{O}\text{C}\ \text{E}\Pi\text{O}\text{I}\text{E}\text{I}$. Of Hyllos, the second son, we have a Thēseus (or Hercules) (Pl. XX, 14) and a bust of Apollō (Pl. XX, 3), each signed, $\Upsilon\Lambda\Lambda\text{O}\Upsilon$; also a cameo signed, $\Upsilon\Lambda\Lambda\text{OC}\ \Delta\text{I}\text{O}\text{C}\text{K}\text{O}\Upsilon\text{P}\text{I}\Delta\text{O}\Upsilon\ \text{E}\Pi\text{O}\text{I}\text{E}\text{I}$. The third, Hērophilos, is known only by a cameo head of Tiberius, the signature on which also tells that the artist was a son of Dioskouridēs. Aspasio was apparently a contemporary of Dioskouridēs. His bust of the Athēna Parthenos of Pheidias (Pl. XX, 9) and his Herm of the bearded Dionysos (Pl. XX, 13) show great delicacy if no originality and bear the signature, $\text{A}\text{C}\Pi\text{A}\text{C}\text{I}\text{O}\Upsilon$. Agathangelos, too, lived early in the period. His portrait head of Sextus Pompey (Pl. XX, 6) bears the signature, $\text{A}\Gamma\text{A}\Theta\text{A}\text{N}\Gamma\text{C}\text{A}\text{O}\Upsilon$. Gaius

seems, also, rather early. His head of the dog, Sirius, reads, ΓΑΙΟC ΕΠΟΙΕΙ, and Polykleitos evidently comes after Dioskouridēs with a Diomēdēs with the Palladium. ΦΗΛΙΞ ΕΠΟΙΕΙ, in two lines on a picture of Odysseus and Diomēdēs with the Palladium, tells the name of Felix, an artist whose close dating is more uncertain, as is also that of the following names: Gnæus, with a youthful Hercules head (Pl. XX, 1) inscribed, ΓΝΑΙΟC, and equal to the best of Dioskouridēs, a Diomēdēs (ΓΝΑΙΟΥ), a Melpomenē (-ΝΑΙΟΥ) (Pl. XXI, 1), and an athlete anointing himself with oil (ΓΝΑΙΟΥ) (Pl. XX, 4); Daliōn, with a youthful head inscribed, ΔΑΛΙΟΝ, and a Nērēid riding a sea-horse, inscribed, ΔΑΛΙΩΝ; Kleōn? with an Amazon's head broken in two and inscribed, ΚΛΕΙC, the rest of the name being lost with the missing half of the stone; Aulus, with a nymph's head and bust (ΑΥΛΟΥ), an Aphroditē and Erōs (ΑΥΛΟC) (Pl. XX, 10), a bust of a young satyr (ΑΥΛΟΥ), a Cupid bound before a trophy (ΑΥΛΟΥ) (Pl. XXI, 3), an athlete (ΑΥΛΟC), and others. The style and merit of these cuttings are very uneven, and Furtwängler considers that this weakness of the artist has led to the frequent forging of his signature. I have followed Furtwängler's attributions in the above gems in the absence of an opportunity to examine the stones themselves, but it is proper to say that the existence of Aulus has been disputed altogether by several of the earlier authorities.

Then there are Quintus, signed in Greek, as Κόιντος, on a fragment of a cameo which shows the legs of an armed man walking; Lucius, also in Greek, as Λεύκιος, on a two-horse chariot; Anteros, signed, ΑΝΤΕΡΩΤΟC, on a Hercules carrying a bull (Pl. XX, 7); Teukros (ΤΕΥΚΡΟΥ), on a Hercules with a nymph; Philēmōn (ΦΙΛΗΜΟΝΟC), on a Thēseus with the slain Minōtaur, a cameo; Pamphilos (ΠΑΜΦΙΛΟΥ), on a seated Achilles playing the lyre (Pl. XX, 15); Agathēmeros, with a head of a philosopher, perhaps Sōkratēs (ΑΓΛΘΗΜΕ behind the head and ΡΟC under it); Skylax (ΣΚΥΛΛΞ and ΣΚΥΛΑΚΟC) on a dancing satyr and on a cameo with a youthful Hercules

playing the lyre, and Sōstratos (ΣΩΣΤΡΑΤΟΥ), on two cameos and on a Nikē sacrificing a bull (Pl. XX, 12).

The latest of this group of artists, in fact the latest known signature, for the custom seems to have died out under the Flavian emperors, is Evodos whose bust portrait of Julia, daughter of Titus, is signed, ΕΥΟΔΟΣ ΕΠΟΙΕΙ, (Pl. XX, 11).

Tryphōn, whose art Addaios, the poet, has commemorated in an epigram, appears to have been the court gem-engraver of Polemōn, king of Pontos, himself evidently a connoisseur. Of his presumptive work we have the famous Marlborough cameo picturing the marriage procession of Cupid and Psychē and bearing the inscription, ΤΡΥΦΩΝ ΕΠΟΙΕΙ. In spite of Furtwängler's endorsement I feel an instinctive suspicion of this signature. It is engraved in intaglio on a cameo, an easy and common method of modern interpolation, and the epigram might readily have suggested the name.

Other artists, known to us only from cameos but who may well have cut intaglios also, are Rufus, Diodotos, Saturninus, and Epitynchanos, and to the entire list may perhaps be added the names of Mykōn and Pharnakēs, on the authority of Reinach, and Koinos on that of Brunn and King.

It should, however, be said that many of the names given above have been disputed and more or less seriously questioned by earlier authorities, either as being names of owners or recently interpolated signatures, and, in some cases, the suspicion has extended to the genuineness of the gem itself. Briefly I may say that the existence of the artists Agathangelos, Anteros, Aulus, Gaius, Gnæus, Lucius, Philēmōn, Polycleitos, Scylax, Sōsoklēs, and Sōstratos has been disputed and these are placed by Dr. Brunn's catalogue, as edited by King, in the doubtful list. Their list of names, certainly *not* artist signatures, includes Agathēmeros and Quintus.

In commenting on this it must be remembered that Brunn's catalogue was published in 1859, in the full heat of the reaction against the Poniatowski forgeries. Köhler, too, upon whose authority much of the catalogue depends, while rather a prophet than a disciple of the reaction, was certainly an extremist

in his theories. He denied *all* artists' signatures except those of Athēmōn, Apollōnios, Evodos, Prōtarchos and Epitynchanos, and allowed these on but one gem each. Much has been learned since his day and much since Brunn's. I cannot say that I am free from a feeling that Furtwängler is himself inclined, sometimes, to be just a trifle too certain of his ground in what is, at the best, the most theoretical and uncertain side of the whole subject. Still, his equipment and opportunities for exhaustive study of the matter in the light of the latest knowledge were unequalled, and his conclusions in so many cases seem to me well founded that I consider his list of artists the only one at present worthy to be described as tentatively authoritative. I may add that, as a matter of personal opinion, I attach no weight whatever to the earlier criticisms of the identity of, at least, Skylax, Sōsoklēs and Agathēmeros.

Let me refer, in closing the matter, to the comments I have already made on artists' signatures of the Hellenistic Period with reference to the possibility or probability of the name of a supposed gem-engraver being really that of an owner. The presence of the ἐποίησεν of course means the artist or a fraud, the genitive may as well indicate owner as artist; so, also, the nominative. As a corroborating circumstance, the occurrence of the same name on two gems that, judged by their character, may be from the same hand is, when this evidence be not weakened by the commonness of the name itself, a strong argument. Furtwängler does or does not attach much importance to differences in the lettering, as he tries to make his point. Sometimes he seems very free and, again, most rigid. Personally I think that unless some special reason for a difference appears—such, for instance, as space considerations,—serious variations in signatures should count against their being those of the same artist. For the rest, what I have said before applies equally here. Each case must be passed upon on its merits, bearing well in mind the enormous number of forged signatures, both of the apparently authentic names given above and of a host of others culled by diligent seekers from Pliny and other sources.

CHAPTER VIII

GEMS OF THE LATER EMPIRE.—CHRISTIAN GEMS.— MITHRAIC AND Gnostic TALISMANS

WITH the accession of Commodus the decline of the glyptic art had definitely set in and, save for a very limited and flickering revival under Constantine, progressed to the end. The second century A. D. strove feebly to preserve good traditions, and there were still a few pretty good portraits, but the numerous pictures of protecting deities and their symbols, still used for signets and talismans, or of animals and genre subjects show a dull uniformity and an utter lack of originality or merit, together with feeble and sketchy workmanship which grades down to the representation of a figure by a few strokes of the wheel ploughed roughly into the stone (Pl. XXVII, 1, 13, 14; XXVIII, 13, 15, 18—21; XXIX, 1—3, 7—9). The drill was little used. If a talisman or amulet was wanted, it was the subject rather than the execution of it that counted, while, as for the signets, there seems to have been no art public that recognized or cared for the best work. As in all decaying civilizations, ostentation and the desire for ornaments that were at once showy and expensive led to the profuse wearing of pearls and jewels, and the delicate art of the gem-cutter found no patrons. With the exception of the Gnostic amulets, many of which were quite large, and a very few large stones intended for ornaments, all were ring-stones, usually with a flat picture surface but sometimes slightly convex.

MATERIALS.—These remained very much as in the preceding epoch. Carnelian was commonest and, next, chalcedony. Nicolo and plasma held, and all the jaspers, red, yellow, green, mottled, and red-spotted (heliotrope), enjoyed an increasing

vogue, doubtless because magical qualities were attributed to the stones themselves. Amethyst, agate, garnet, sard, sardonyx, usually cut horizontally, and rock-crystal were rarer. Hematite, a powerful amulet stone among the Gnostics, became popular for their crude representations and lapis lazuli was quite common. This stone was also used freely by certain gem-cutters of the sixteenth and seventeenth centuries who engraved on it antique subjects and whose rough work resembles so closely that of the decaying Empire that gems of this material must be regarded with the most cautious suspicion. Pastes were practically things of the past.

SUBJECTS.—Crude figures of deities were much in evidence (Pl. XXVIII, 17—19; XXIX, 7—9), constant repetitions of the same conventional poses, many of them taken originally from the statue types. Fortuna and Victory are by far the commonest (Pl. XXIX, 7, 17); then Nemesis, Mercury (See Pl. XXIII, 16), Jupiter enthroned or standing (See Pl. XXIII, 11, 19), Serapis, usually as a bust (See Pl. XXI, 17; XXII, 9), Minerva (Pl. XXVIII, 18), Ceres (See Pl. XXIII, 2), Venus, generally the Victrix type (See Pl. XXIII, 21), Mars (See Pl. XXIII, 22, 23), Bacchus (Pl. XXVIII, 17), Diana (Pl. XXVIII, 19), Neptune (See Pl. XXIII, 20) and all the rest. Sometimes several are represented together (Pl. XXVIII, 21; XXIX, 7, 17), and some of the types with combined attributes are not easy to identify, especially when they are so badly done that it is hard to say just what the artist tried to cut.

Besides these, were representations of callings and occupations (Pl. XXIX, 2), the games of the circus (Pl. XXVII, 13), masks, combined masks (Pl. XXVIII, 13), symbols (Pl. XXVII, 1; XXVIII, 16; XXIX, 4, 5), grylli (Pl. XXVII, 2—5), astronomical figures (Pl. XXIX, 1, 4, 10, 11), and animals (Pl. XXVIII, 14; XXIX, 3). Subjects from the epics were rarely chosen, another evidence of the decline of artistic feeling (Pl. XXVII, 11, 15). One of the few literary gems of the period shows the combat between the pigmies and the cranes (Pl. XXVII, 12). Generally speaking, either luck had to be

invoked by some fantastic design or they fell back on the commonplace.

Portraits of the wearer or of some one he desired to compliment were, however, still favorites as signets (Pl. XXVIII, 1—12) and, as I have said above, the work on these was better than on the subject pieces. Whether a man wanted a portrait of himself or of another, he wanted one that could be recognized or its value would be lessened or lost, and, doubtless, this need brought it about that portraiture retained much of its merit when other forms of art were practically dead. The coinage of the period bears out this contention. They put their best efforts on these gems and they, at least, tried to get a likeness, even when their limitations left the workmanship crude. This was the case even in a gem in which the portraiture idea was subsidiary: the Commodus hunting, which is not at all bad (Pl. XXVII, 19). The famous sapphire seal of Constantius II, referred to in the Introduction, dates from the first half of the fourth century and is, as might be expected, the finest example we have of the engraving of its time. Also it is characteristic in its elaborate picture idea, and the ΚΕΣΑΡΙΑ ΚΑΤΗΠΑΔΟΚΙΑ under the figure of the genius representing that city, is another of the rare cases of descriptive inscriptions. At last, however, even portraiture failed and barbarism reigned supreme.

CHRISTIAN SUBJECTS

With the rapid advance of Christianity we may now expect to find Christian gems, though these are not very numerous (Pl. XXVIII, 10; XXIX, 6, 12). There were a few in the preceding epoch: such symbols as the anchor, taken from the coinage of Asmonæan kings of Judea and, perhaps, adopted on account of its resemblance to the cross. The direct representation of the latter was not in accord with the taste for more recondite symbolism. Besides, in the earlier times, its use as a signet may have been looked upon as irreverent. Certainly it would have been dangerous in periods of persecution, and most Christians did not invite martyrdom. The lyre was

avored, as symbolizing harmony and concord, the ship, generally with the Chrisma for a mast, symbolized the voyage through life to a better land. Sometimes, oddly enough, a cock appears as a passenger. He carries a palm branch and is supposed to represent the soul of man triumphant. The dove had its obvious connection with the Saviour's life in the manifestation of his divinity, and, also, the Kabbalistic sum of the numeral letters in the Greek word, *περιστερά* (dove), was 801, identical with that of Alpha and Omega, which the Lord had called himself. Lastly, the fisherman was pictured, because his occupation suggested to the believer "Little children drawn up out of the water."

To these five symbolic signets Clemens Alexandrinus (III, 11), writing in the latter half of the second century, limited his followers, also enjoining: "For we are not to delineate the faces of idols . . . nor a sword nor a bow . . . nor drinking cups. . . Many of the licentious have their lovers engraved or their mistresses, as if they wished to make it impossible ever to forget their amatory indulgences, by being perpetually put in mind of their licentiousness." He does not mention, in his list of permitted emblems, possibly for some reasons of his own, the wreath, the palm-branch or the fish, the last one of the commonest of Christian symbols. The Kabbalists gave the name, *dag* (fish), to their expected Messiah and taught that the sign of his coming would be the conjunction of Jupiter and Saturn in the sign, *Pisces*, but to the Christians the Greek word, *ΙΧΘΥΣ*, gave the initials of the words, *Ἰησοῦς Χριστὸς Θεοῦ Υἱὸς Σωτὴρ* (Jesus Christ, Son of God, Saviour). Also they used the Chrisma, the X and P joined as a monogram, *XP*, sometimes varied more or less and sometimes worked into other designs. More rare and of later origin are simple representations of the cross, though it, too, is worked into many combinations, such as where it rests on a fish, with doves perched on the arms or where two fishes hang from them. The frog was a rather unusual device on these gems and typified, by its seeming change from a fish to a quadruped, the resurrection of the soul.

All of these continued in use, two or more often appearing on the same gem, but certainly as early as the end of the second century one of the most favored of all was especially allowed by Tertullian: a picture of the Good Shepherd carrying a lamb and often with one or two sheep beside him (Pl. XXIX, 6). In earlier times this would have been regarded as idolatrous, as was always, before the latter part of the fourth century, any attempt at a direct likeness of Christ. Epiphanius, in his attack on the heresies of the Carpocratian Gnostics, makes this clear, and the earliest essays at divine portraiture on gems seem to be due to the Nestorian heretics who took refuge in Persia under the Sassanian dynasty.

Possibly of about 300 A. D. is a curious carnelian with a very crude picture of Abraham about to sacrifice Isaac, with the angel interfering (Pl. XXIX, 12). On the upper part of the stone are two men and a horse upside down, perhaps the servants and traveling beast of Abraham. In the fourth century and throughout Byzantine times there are large stones showing such pictures as Christ enthroned, sometimes with the twelve apostles around him and done in the style characteristic of Byzantine art.

Of more doubtful origin are the figures of Victory that appear not very rarely on Christian gems, sometimes together with Christian symbols and once, to my knowledge, on one side of a stone that has the Good Shepherd on the other. Obviously the Victory was the most adaptable of the Pagan personifications, whether on the score of its symbolic inference or of the resemblance which, later, led the Mediæval interpreters to regard it as the figure of an angel. On the other hand, it is not impossible that certain Paganizing Gnostics may have, for the same reasons, welcomed it as an especially subtle wedge wherewith to corrupt the imagery of the orthodox. Altogether, the gems bearing it cannot but cast a shadow of suspicion on their wearers as having been either secret enemies, heretics or, at the best, Christians of a distinctly liberal turn of mind.

Undoubtedly Pagan in its origin, if not in its motive, is the confusion of Jupiter Serapis with Christ, often ignorantly

done by the old religionists and deliberately by the Gnostics. A colorable relation existed in Serapis' rule over the Under-world and the future life, while, whether as a result of the confusion or arising from independent causes, there is no doubt that many of the later representations of the Jesus took form and feature from the calm, benignant face of the Alexandrian Jove. A mottled brown jasper engraved with an anchor and, on the reverse, the legend, ΜΕΓΑΣ ΣΑΡΑΠΙΣ (Great Serapis), is an example of this mingling.

INSCRIPTIONS.—The inscriptions on stones of this period have no especial characteristics except that none of them is the artist's name, that the lettering is almost always crude and barbaric, and that they are often of considerable length. They may be owners' names, in full or abbreviated (Pl. XXVIII, 17), sentiments of some kind, either independent of or suggested by the design, descriptive legends, such as the name on Pl. XXVIII. 14, the ΗΡΑ ΟΥΡΑΝΙΑ (the Celestial Juno) on a large stone showing the goddess riding a lion between the Dioskoroi and, beneath, ΑΜΜΩΝΙΟΣ ΑΝΕΘΗΚΕΝ ΕΠΙ ΑΓΑΘΩ (Ammonios dedicated (this) or placed (this) on for good (fortune)), or the ΑΡΗΓΩ ΡΩΡΟΜΑΝΔΑΡΗ (I protect Rōromandarēs) with a Gorgōn's head (Pl. XXIX, 21); but commonest of all were words or combinations of letters in the nature of charms, calculated to invoke or compel some supernatural influence in favor of the wearer. These I will discuss under the Mithraic and Gnostic Gems which, by their distinct character and great number, merit separate treatment.

Another of the more elaborate inscriptions may be referred to as an example of the kind of thing that was sometimes attempted. It occurs on a rather large stone bearing the portraits of a man, woman, and child, evidently some Christian family of the third century (Pl. XXVIII, 10), and is apparently a gift to the master of the house from some friend. Around the top of the stone we read, in fair lettering save that no curves are attempted, Εὐτύχι Πάνχαρι μετὰ τῆς Κυρίας Βασιλίσσης καὶ Παυλῖνας (Good luck (to you), Pancharius, with the lady Basilissa and Paulina). Below the father is ΙΕ ΘΕ and

below the mother, $\text{O}\Gamma$ ($\epsilon\acute{\iota}\varsigma$ $\theta\epsilon\acute{o}\varsigma$ —one god), while above the child's head and between those of its parents, also in barbaric lettering, is the word, $\text{zo}\eta$ (life). Here, then, are names, an invocation of good fortune, and a suggestion of the faith of the wearer, all on a single stone. Generally an inscription confines itself to one of these provinces.

The Christian inscriptions occur on gems with and without the pictures and cover a pretty wide field. $\text{IX}\Theta\Upsilon\Gamma$ is, of course, common and some, such as $\text{XPICTE CWZE KAPPIANON AEPOTE}$ (O Christ, save Carpianus forever) and $\text{IHCOYC \Theta EOY YIOCTHPE}$ (Jesus, Son of God, keep me), are obviously the Christian variants of the Pagan wish-mottoes which had but to do with the temporal life. IHCOYC alone is found on some, XP on others (Pl. XXIX, 6), $\overline{\text{IC}} \overline{\text{XC}}$ ($\text{I}\eta\sigma\omega\upsilon\varsigma$ $\text{X}\rho\iota\sigma\tau\acute{o}\varsigma$) on a large picture of Christ and his apostles, while many, naturally, bear the names of the owners.

Christian gems must be noted as being one of the classes that were much imitated in the days of forgery. The simplicity of the symbols, crudeness of the execution, and the natural interest attached to them made them a fruitful field, so that both knowledge and caution are necessary in passing upon their genuineness.

MITHRAIC GEMS

Before taking up the consideration of Gnostic glyptographs it is first in order to examine the stones that evidence the popularity of the cult of the Persian Mithras, first introduced in Rome after the conquest of Pontus by Pompey, and which, under the Empire, attained a high degree of popularity (Pl. XXIX, 13, 14, 17—19, 23?).

Properly speaking, it was the modified Zoroasterism of later Persian times. In the Zendavesta, Ormuzd had been the principal of the good powers, the first of the seven Amshaspands, and Mithra or Mithras was the head of the twenty-seven Izeds or emanations therefrom, who governed the heavenly bodies and the elements in the interest of man and contended in his behalf with the twenty-seven Devs, the corresponding

powers of evil. Mithras' rule was over the Sun, and his transition westward and identification with other deities was therefore easy—Phanakēs in Asia Minor and Apollō and Hēlios in Greece and Rome, while he usurped, in a measure, the place of Dionysos in the long established Dionysiac mysteries.

In Rome, as time advanced, there were many modifications and adaptations of his esoteric cult ideas. The tendency was in the direction of a brotherhood with initiations and lodges, one of which is preserved today, almost intact, at Ostia, and there seems to be a close connection between many Mithraic ceremonies, running down through the secret societies of the Middle Ages, and those of their professed successors, the Free Masons. There were preliminary trials consisting of twelve, or, it has been said, eighty tortures, including fire, water, hunger, thirst, scourging, and solitude, and the initiation is believed to have comprised seven degrees called respectively the ravens, the secret, the fighters, the lions, the Persians, the Sun-runners, and the fathers. On the other hand, there was much that was akin to the ideas and ceremonies of Christianity. Mithras, as the first and greatest emanation of the supreme Ormuzd, furnished a close parallel to Christ, and the ritual included both baptism and a eucharistic feast, all of which goes far to explain the prominent place taken by Mithrasism in the evolution of the somewhat later development of the different Gnostic sects. In the times of Hadrian and several of the princes that followed him the Mithraic brotherhood became both fashionable and powerful.

Under such conditions we would naturally expect to find many gems reflecting the cult and, at the same time, throwing light upon its ideas and superstitions. These are, indeed, fairly numerous and some of them, in contradistinction to the Gnostic works, show a very fair degree of technical skill. Art, of course, is a thing neither to be looked for nor found.

The substances used are almost invariably the different jaspers, green, yellow, and mottled, or the heliotrope or blood-stone. The subjects include, first of all, the lion, as typifying

the Sun (Pl. XXIX, 23), either pulling down a bull (Pl. XXIX, 13) or carrying its head in his jaws (Pl. XXIX, 14) to indicate supremacy over the Earth which, in Mithraic symbolism, is represented by a bull. The serpent, in the East the personification of the powers of evil, is sometimes shown trampled under the feet of the lion or of a youth in a Persian cap, a representation of Mithras himself who, again, is often pictured plunging a sword into a bull to symbolize the rays that pierce into the bosom of the Earth and slay that they may fructify. The dog that is sometimes introduced licking up the blood is rather more difficult to interpret but may have reference to the doctrine of fructification, the dog being the most venerated of animals among the modern Parsees, descendants of the Persians. The star with eight points was also a solar emblem of the cult, and all these are often worked into rather elaborate designs involving zodiacal and astrological ideas, often difficult to co-ordinate and interpret. Other symbols are, also, sometimes introduced, as, on one gem, three ears of wheat at the end of the bull's tail, perhaps in allusion to the life-giving plants that, according to Zend tradition, sprang from the tail of the Primeval Bull slain by Ahriman, the principle of evil. Altogether it is easy to imagine the study that can be devoted to and the information to be gained from these gems.

The rising and setting of the divine orb is symbolized sometimes by two torches, one raised and one lowered in the hands of Mithras, or, again, by ascending and descending chariots. A naked female figure bearing the raised and lowered torches, rudely cut on a curiously speckled agate in my possession (Pl. XXIX, 19), may, I have thought, have reference to worship of Venus Mylitta, under the name of Mitra, the morning star, and which Hērodotos tells was introduced into Persia through Assyria. She was a genius presiding over love and directing the harmonious movements of the other planets.

Another class of gems appear to refer to the ceremonies of initiation, such as a lion standing over a prostrate man and a not uncommon representation of a man bound to a column upon which is a griffin, sacred to Apollō (later identified with

Mithras), with its paw on a wheel. In the field is sometimes the word, ΔΙΚΑΙΩΣ (justly). On a gem in my possession (Pl. XXIX, 18) a Cupid is substituted for the initiate and may be a conception of some irreverent victim of love who thus makes jest, at once of his own or his neighbor's creed and of his amorous sorrows. As a suggestion of what the twelve degrees of Mithraic initiation were like we read that the trials extended over forty days, in curious analogy with the Christian Lenten season of self-denial. The candidate lay naked on the snow, he was scourged, and tests with the four elements were part of his ordeal. It is probable that much which seems abstruse on the gems may be susceptible of explanation in this connection.

However, as I have said above, Mithrasism at Rome, doubtless corrupt from the first, tended to slip farther and farther afield, and we find so many of its ideas adopted by the Gnostics that the combinations are often very confusing.

The purpose of these gems was primarily to invoke magic-working influences and to serve as credentials for members of the brotherhood. The signet idea also remained but it is rather doubtful if the wearers could have regarded many of them as ornaments.

GNOSTIC GEMS

Coming now to a consideration of Gnosticism and the vast number of gems that bear witness to its many sects, their numerous adherents and wide influence on the thought and superstitions of the times, we find, at the outset, many theories to explain their origin and development.

Considering the great number of these sects that made head, at one time or another, and their varying tenets, it is not difficult to conceive that *all* the given explanations are well founded. It has been the fashion to regard them as mere Christian heresies, inspired either by honest divergence or by a deliberate scheme on the part of expiring Paganism to conquer its otherwise invincible rival by subtly corrupting it. Both assertions are, I think, true as to certain of the Gnostics, but

I believe them to be later phases of a movement the origin and motives of which had their roots in older creeds and newer World tendencies.

Generally speaking, we find in Gnosticism a mingling of the religion of ancient Egypt, Mithrasism, Neo-Platonic philosophy, the Kabbala, and Christianity, with probably a less direct influence from Buddhism. These elements varied widely in their control in the different schools or sects of the Gnosis. The result was a sort of aristocratic pantheism that arrogated to its adepts all good here and hereafter, as the result of knowledge of the truth and of the proper means of employing it and which, by its arrogated authority and power, found ready and wide popularity at a period when credulity, superstition, and reliance on magic-working substances and formulæ were at their highest flood.

Of course, amid such a farrago, there is always the element of conscious or unconscious charlatanry as a militant motive, and this we seem to find in the Samaritan, Simon Magus, perhaps the earliest proponent of what could be called Gnostic ideas, who dates from early in the first century A. D. Others followed him, some, doubtless, sincere fanatics, others sincere philosophers, and others, again, inspired by more doubtful motives. In the systems of Basileidēs, who flourished in Alexandria in the second century, and of his successor Valentinus we find the most complete development of Gnostic philosophy, and in Manēs or Manichæus, the founder of the Manichæan sect, who lived and died in the third century, the most dangerous and influential of the Christian heresiarchs: one whose influence reached to the Emperor Constantine and who numbered among his followers St. Augustine himself, before that father of the Church turned to orthodoxy.

Little is left to us in complete form of the many early works on this subject. The orthodox, when their control became absolute, searched far too diligently and destroyed too thoroughly for that; but in the *Pistis Sophia* (Faith Wisdom), attributed to Valentinus, we have one example of the gospels of Gnosticism which may inspire at once regret and thanks-

giving: regret for the loss of the means to study exhaustively one of the most curious of the mental emanations of humanity, and thanksgiving that the mind is spared a perusal of theories and doctrines a few pages of which are quite sufficient to make us wonder whether the World has been mad or we are becoming so. To those who desire a more detailed history of the subject I would suggest Dr. Charles W. King's book on *The Gnostics and Their Remains*, a work which, while not especially satisfactory in its arrangement and, naturally, far from exhaustive, will yet give a good enough impression for the purposes of most readers. Our own province is the consideration of the gem-talismans and amulets, the manufacturing and wearing of which was a highly characteristic manifestation of these remarkable superstitions.

As the Gnostic idea involved primarily a conquest and control of invisible agencies by means of knowledge of the mystic influence of substances, forms, and words of power, it is natural that we should look to find these embodied in the shape of charms convenient for being carried on the person. Many of the talismans are too large for ring-stones, and we may easily imagine that concealment was sometimes held to aid attainment of the desired end. Most of them, however, are of a suitable size to set in rings, and it is evident from the reversed lettering on many that they were used as signets and meant to read correctly in the impressions. Even in such cases it is usual to find both sides of the gem engraved with either figure or writing, so that a part, at least, of the talismanic subject or words should be concealed and in close contact with the body of the owner.

MATERIALS.—The stones used were those popular at the times when these gems were in vogue, but we find so marked a preference for hematite, green and yellow jaspers, and heliotrope that we may fancy that some especial virtue was supposed to dwell in these substances. Plasma or greenish chalcidony was also sometimes used and it is quite possible that that color alone may have been regarded as efficacious in some way. Of the finer stones very few are engraved with Gnostic

subjects. Even the carnelian, common enough among the other gems of the period, was seldom employed. Now, more than ever, was the material held potent: witness Pliny's *Natural History*, much of which might better be called "*Supernatural*" and dates from the much earlier time of the *Peri-Lithōn*, one of the Orphic books, which treated of the magical virtues of different stones and their power as preservatives against poisons and in gaining the favor of the gods. Naturally, under such conditions, the beauty of the stone was of no more consequence than the beauty of subject or the art in the engraving; an unimportant lack, perhaps, when the subjects were necessarily ungainly and the art of the engravers nil. Good work on fine stones may pretty safely be placed as fifteenth century or later products, when the attitude toward magic-working devices was very hospitable, and the so-called pierres d'Israel, a term applied indiscriminately to ancient gems, were held to be talismans of power. Especially may this criticism be made of the terminal figure of Osiris and other Egyptian gods with Greek or modern Hebrew letters and astrological cyphers in the field.

Glass pastes, too, would not be considered available for talismans the substance of which was held to be material to their influence. Besides, the stones that were favored were cheap enough to obviate any such tendency.

SUBJECTS.—First and foremost among the subjects is the figure of Abraxas (Pl. XXIX, 20a), sometimes spelled Abrasax, the Pantheios of Gnosticism, evolved by Basileidēs. The name is probably the Greek form of the Hebrew Ha-Brachah (The Blessing) and is reflected in "abracadabra," Ha-Brachah-dabarah (pronounce the blessing), that most potent of mediæval spells. Both Jerome and Augustine also state that Basileidēs argued that the Greek numerical value of the letters of the name equalled 365, the days of the year. This god is represented as having the body and arms of a man, the head of a cock, and serpents for legs. On one arm he carries a shield and in the other hand, generally, a whip but, sometimes, a sword or dart and, rarely, a mace. Occasionally the head is

that of a hawk or a lion, but the significance is the same. Many very wise and recondite theories have been evolved and argued to explain the monstrous combination, but none of them can be called quite convincing. To venture one, which has, at least, the merit of being simpler and more obvious than the others and for those reasons, judging from Gnostic analogies, is least likely to be correct, I would suggest that such a figure is a very reasonable expression of the Pantheistic idea. The head of a bird denotes dominion of the sky, the serpents, that of the Under-world (or, according to some authorities, water), and the body and arms of a man between them, are those of the Lord of the Earth's surface whereon men dwell. In the one hand he bears the shield to defend himself and his followers, and, in the other, some weapon to punish his enemies. It is all of the Universe symbolized in one figure for offense and defense. Sabaoth (From *sabi*, glory, in Hebrew, and compare Sabazios, a name of Dionysos) and Adonai (Lord) are also Gnostic titles of this deity and appear occasionally on the gems (Pl. XXIX, 16); but quite as frequent as Abraxas, often with it and evidently used either as a name or as descriptive of the same being, is *Iaō*, the ineffable name of the Jews (Pl. XXIX, 16, 20a, 26, 28b). To draw the line in such appellatives between names and titles hardly belongs here, but I am inclined, in the light of the inscriptions, to consider the last a broad denomination of the supreme God, proclaimed under the name of Abraxas by Basileidēs and identified with the sun-gods of all times and nations. The others, as I have said, seem to me in the nature of titles taken from gods of earlier theologies and go to express the absorption of their attributes by the all-powerful one of the Gnosis. Rarely the figure has an ass' head, the significance of which is doubtful, unless it be in honor of Typhōn.

Second in frequency on Gnostic gems is the Agathodaimōn (Good Spirit) of the later Egyptians who also knew it under the name, Cneph. This is represented as a serpent having the head of a lion with a crown of rays, generally either seven or twelve, to emphasize the idea of a Sun divinity (Pl. XXIX, 22, 27). It was known variously as ΧΝΟΥΜΙΣ (Chnumis), ΧΝΟΥΒΙΣ

(Chnubis) or ΧΝΟΥΦΙΣ (Chnuphis), which also suggests Cneph. Jablonsky derives Chnumis literally from the Coptic ΧΝΟΥΜ (good) and ΙΣ (spirit). This symbolization may be placed as of earlier origin than the Abraxas figures. The canopic vase, which appears sometimes with the serpent on earlier gems but probably not on later ones, is explained by "Cneph" being rendered "Kannōpos" in classical Greek. It is reasonable to suppose that the adoption of the serpent as a device may have sprung from the creed of the Ophites or Naaseni (Serpent-worshippers), one of the earliest Gnostic sects, whose doctrines are set forth with considerable not unnatural confusion by the early fathers. Possibly they were based on a distorted notion of the first Temptation, which held the serpent to be the dutiful servant of God appointed to work out the prescribed destiny of the human race. More probably, however, the idea had an earlier origin than any of the developed schools of the Gnosis and found its roots in the earlier superstitions that vested the serpent with all knowledge. The Brazen serpent raised by Moses in the Wilderness gives one analogy, its connection with Æsculapius and the healing art throughout Pagan times voices the same idea, and Galen writes in the second century A. D.: "Some indeed assert that a virtue of this kind" (as an amulet) "is inherent in certain stones, such as it is certain is possessed by the green jasper, which benefits the chest and mouth of the stomach when tied on them. Some indeed set the stone in a ring and engrave upon it a serpent with head crowned with rays, according to King Nechepsos in his thirteenth book." It is interesting to note in this connection that green jaspers and green chalcedonies are the most favored substances among our gems for this device and that it is almost always accompanied by the triple S transversed by a bar (Pl. XXIX, 22), also frequently found alone, and which, again, is apparently a mere conventionalized and perhaps purposely obscured representation of the staff of Æsculapius with the serpent coiled about it.

In addition to these two, the commonest among Gnostic subjects, there are also many figures of different planetary

genii, sometimes with two, sometimes with four wings, beings which were supposed to preside over the different Heavens. Scaliger believed them to be representations of the Decani, the three chief stars in each sign of the Zodiac. Close identification is often more than difficult, even when the names are added in their barbarous forms and letterings, though it is probable that Ildabaoth, the good genius who, according to Valentinus, reigned in Saturn, is most often intended. Sometimes the genius has upon its head something which seems to represent the sacramental table, and they bear sceptres of different kinds to symbolize their power and dominion (Pl. XXIX, 24).

Strongly in evidence, also, on Gnostic gems are types derived from Egyptian theology: the jackal-headed Anubis (Pl. XXIX, 28a), in the place of Hermēs whose caduceus he often carries, whose office here is to conduct the accredited souls along the planetary path through the regions of the many Heavens, up to their final rest in the Pleroma, the One embracing All within itself. Gems bearing this figure may also be of earlier date and non-Gnostic origin and, if done in the time of the Hadrianic revival, may be very well engraved. So, too, we find other animal-headed types, sprung from the same Egyptian sources, but a most interesting expression of this idea is on a gem formerly belonging to Dr. King where Anubis is represented carrying a lamb and playing the part of the Good Shepherd on the orthodox Christian gems (See, also, Pl. XXVI, 5).

To the subjects of Egyptian origin, also, belongs the representation of the child, Horus, finger at lips and scourge in hand, himself a Sun-god, seated upon a lotos flower (Pl. XXIX, 20b, 26) or in a boat, symbol of the Moon, and, occasionally, with the phallic emblem. Pictures of the cynocephalus baboon of Thoth, generally with exaggerated phallic attribute, fall in the same class as does the ibis, often bearing attributes; also the beetle. Sometimes the cynocephalus is adoring Horus, sometimes, a pillar which may be surmounted by a triangle, a symbol of the Moon to which the baboon was consecrated. Possibly the pillar has reference to the "Pillars of Hermēs," by

means of which the Gnostic sage, Iamblichus, solved the questions propounded to him by Porphyrius. Belus mounted on a lion was developed from Mithrasism, as were, according to some, the winged genii above referred to. The serpent with its tail in its mouth, which often forms a border on Gnostic stones (Pl. XXIX, 25, 26), may be, in some cases, of Ophite significance or may have reference to earlier phases of serpent worship, but a passage in the *Pistis Sophia* seems to place it among solar devices. It reads: "And the disk of the Sun was a great dragon whose tail was in his mouth, who went up into the Seven Powers on the left hand, being drawn by four Powers having the similitude of white horses. But the going of the Moon was in the shape of a boat," etc., etc. The mummy encoiled by the serpent probably has reference to the protecting power of the Agathodaimōn over the dead.

Of female figures, often winged, there are representations of Athor and Sate, for the Roman Venus and Juno. The naked woman of the Aphroditē Anadyomenē type that is found on Gnostic monuments can be explained as the Truth shown to Marcus, a disciple of Valentinus, and described by him in his Revelation.

With the above summary of basic ideas as a foundation, the student may expect to find many variants and combinations with Egyptian and Mithraic ideas and Roman deities, more especially Hermēs and the Jupiter Serapis, imported and adapted from Egypt, also the Egyptian asp (Pl. XXIX, 15). A yellow jasper in my possession, showing on the one side a Hekatē (Pl. XXIX, 16) and on the other a man worshipping a serpent rising above an altar, is an example of the mixed notions of the times. Curiously enough, however, there is a queer trend of consistency in the representation of even these wildly inconsistent ideas, and, in studying the gems, we absorb a sense of the unfitness of certain types that serves to relegate them to later periods, like the Osiris stones I have already referred to and which cannot be called forgeries in the present acceptance of the term. They are rather attempts of a later superstitious age to imitate and reproduce talismans and am-

ulets which, to its thought, embodied power and protective influence. Such gems are foreign in spirit to those of the early Gnostics in a way that no reasonably clever forgery would be.

Had more of the once numerous works of the teachers of the Gnosis escaped the all too thorough search of intolerant orthodoxy, light might be thrown on much that is now obscure, and the words "probably" and "possibly" might have occurred less often in this chapter. Still, paradoxically enough, the general veil of obscurity itself would doubtless grow more dense with each added elucidation. It must always be remembered that the philosophic Gnostics of Alexandria had, least of all, the desire to make their knowledge clear to the unlearned and that its merit consisted, to a large degree, in its exclusive possession by the elect.

INSCRIPTIONS.—Nearly all Gnostic gems are inscribed, and many bear only inscriptions. Let not, however, the student imagine that he will find in these an aid to the puzzles that beset him. The names and titles of the Abraxas god that occur, together with his figure or alone, we know; so those of the Chnumis-Agathodaimōn. Then, too, the legends, CEMEC EIAAM (The eternal Sun) and ABAANAΘANAABA (Thou art our father), are frequent inscriptions, the latter referring to Abraxas. Also the seven vowels are often found, symbolizing the seven Heavens whose mystic harmony kept the Universe together and which, according to the *Pistis Sophia*, if rightly uttered together with their forty-nine powers, were of force to compel the great First Father himself to tremble and to deliver souls out of the deepest dungeons of the Dragon of Outer Darkness. The Delphic Ε , which stood for five, was another holy numeral, upon the mysteries of which Plutarch has left us a curious dissertation.

In addition to these, there are found on the Gnostic gems a great number of names of Jewish angels taken from the Kabala and of divinities drawn from the Magian theology, each of whom was supposed to hold sway over some particular planet or constellation or Heaven. According to the Schema of the Ophites, Adonai was the genius presiding over the Sun, Iao over the Moon, Eloï, Jupiter; Sabao, Mars; Orai, Venus;

Astaphai, Mercury, and Ildabaoth, Saturn. These were for the most part mischievous and, therefore, especially to be controlled. For the genii of constellations they took the names of Jewish angels, viz., Michael presided in the Lion, Gabriel in the Eagle, Suriel in the Bull, Raphael in the Serpent, Thanabaoth or Sabaoth in the Bear, and Erataoth in the Dog. Many other names of presiding genii also occur, varying in the different sects, and the object of this may be understood when we appreciate the importance attached by the Gnostics to pronouncing them. To call a power properly by its proper name was a means of compelling it to the service of the learned, and therein did the Gnosis seek to invest its followers with authority over the world of spirits. The Ophites also taught, according to Hippolytus, that the Universe could not hold together unless the names of the great ones were uttered. Such were KAYAKAY (Kauakau) or KAYAAKAY (Kaulakau), the name of "Adamas who is above," ΣΑΥΛΑΣΑΥ (Saulasau), that of "Him who is below," and ΖΕΗΣΑΡ (Zeēsar), "The third of the Jordan that floweth upward." "Above," he goes on to say, "are Mariamne, the sought-after, and Jothor, the great and wise, and Sephora, she that seeth, and Moses."

Another sect, the Peratai or Fatalists, held that ΧΩΖΖΑΡ (Chōzzar) was the name of Neptune, ΚΑΡΦΑΚΟΖΗΜΟΧΕΡ (Karpakosēmocher), of the Steward of the East; ΕΚΚΑΒΑΚΑΡΑ (Ekkabakara), of the West; ΑΡΙΒΑ (Ariba), of ruler of the winds; ΣΩΚΛΑΜ (Sōklam), of Osiris, the ruler of the twelve hours of the night; ΕΝΥΩ (Enuō), of Isis, ruler of those of the day; ΒΗΝΑ (Bēna), of Ceres, the Left-hand power of God, and ΜΗΝ (Mēn), of the Right-hand power that presides over the fruits of the Earth. According to the same doctrine, Chōzzar "Who converts into a sphere the dodecagonal pyramid, etc." had five ministers, the four whose names we know being called ΑΟΥ, ΑΟΑΙ, ΟΥΩ and ΟΥΩΑΒ—mere strings of vowels which, however, serve to suggest possible interpretations of many kindred inscriptions on the gems.

Again, according to the Pistis Sophia, the three all-powerful ones were ΙΨΑΝΤΑΧΑΙΝΧΕΟΥΧ (I decline giving the English

letters), from whom emanated the Power which dwelt in Mars, BAINXWUX, from whom came that of Mercury, and ΠΙΣΤΙΣ ΣΟΦΙΑ (Pistis Sophia), that of Venus; while above this triad was one still higher, the unseen Gods: ΑΓΡΑΜΜΑΧΑΜΑΡΕΓ (Agrammaxamareg), ΒΑΡΒΗΛΩ (Barbelō), the Heavenly Mother of Jesus, and ΒΔΕΛΛΗ (Bdellē). Also it taught that the incorruptible names of the planets were ΩΡΙΜΟΥΘ (Ōrimouth), Saturn; ΜΟΥΝΙΧΟΥΡΑΦΩΡ (Mounichouraphōr), Mars; ΤΑΡΠΕΤΑΝΟΥΦ (Tarpetanouph), Mercury; ΧΩΣΙ (Chōsi), Venus; and ΧΩΝΒΑΑ (Chōnbal), Jupiter.

I forbear going further into the "Names," lest I drive my readers altogether mad, but a few of the formulæ seem necessary, if only to show their general character. Greek, Hebrew, Chaldee, Coptic, and Syriac words, often much corrupted, are involved in these, in what Jerome describes as "tormenta verborum," turned backward and formed, with letters repeated or out of place, word mixed with word and the whole still further complicated by scattering the seven vowels here and there, for it must always be remembered that much of the value of these charms depended upon their being undecipherable by other than the wearer. Undisguised examples are ΑΝΟΧ ΧΟΑ ΧΝΟΥΒΙC (I am all the Good Spirit), ΑΙΝ ΘΑΡΡΑΙ (The eye shall behold), ΑΔΟΝΑΙ ΑΑΝΤΑΑΑ (Lord, Thou art the Lamb), ΧΩCΑ ΜΙΛΑΩΘ (He hath seen the Pleroma), and ΑΜΛΑΧΟ ΑΜΑΘΑΖ ΛΖΑΙ (rendered by Stiechel, Salama zebaam jatzael—Peace unto the army of these).

A curious specimen of writing parts of the same word in different lines is found on the for the most part Hebrew legend

ΙΑΒΑΤΑΟΡ
ΘΟΝΑΤΗCΑΙ
ΑΡΒΑΘΙ
ΛΑΜ
ΑΩ

which must be transposed and doctored to read ΙΑΒΑΤΑΟΡ ΘΟΝΑΤΗC ΛΑΙΛΑΜ ΑΡΒΑΘ ΙΑΩ (Jehovah, the Pure Æther, the Fire forever, the Four, Iao), "the four" signifying the Tetrad of the Theogony of Marcus. ΑΝΑΚΛΑ ΑΚΔΑΑΘΩΙΩΙ (Pur-

sue them unto destruction, O Lord) is found on the reverse of a gem engraved with the figure of a sphinx, emblem of power and destruction. BAPIA ZAΣTA IAW (Jehovah, the Creator, the Destroyer) is an example of the Chaldee, and the Coptic words, IATHAI (Providence of God), MAΘAHE (Honor of God), PEOYHAE (Will of God), XWMI (Power of God) and ΣBW (Wisdom), designate Phronēsis, Logos, Nous, Dynamis, and Sophia, the five emanations from the Godhead. KAYAAKAY is the Basileidan name for the Saviour, MOYΘ (The Mother), a title given to Isis, and NOOT, the corrupted Coptic NOYT, for God. OPWPIOYΘ (Light of Light) is found on gems, together with the udder-shaped vase of the Isiac ceremonial. A few of the many other legends are MEΣ XANAΛW (The Messiah be propitious unto me), MAPWHNI (Enlighten mine eyes), MAI MYM YXAYM WI (Being, Fount, Salvation, Food, Iao), TAAA APAIW WAPAOPO NTOKO NBAI (Protector, Creator, rule, speak, O Lord), XAIA (Life), and ΔΕΙΟΣ (Reverence).

Three characters are frequently found together: ‡, ω, and Z. They stand for the lucky and sacred numerals, viz: 3, 5, and 7; Triad, Pentad, and Heptad; and, for the same reasons, inscriptions in three, five or seven lines are especially favored on gems. Naturally a considerable number of inscriptions are in the old Jewish characters, *not* the modern Jewish, the resource and the pitfall of the forgers; but the great majority, whatever the language, are in Greek letters, usually cut square and without curves, another evidence of the growing barbarism and incapacity of the times.

As if the above described entanglements were not enough, the holy names were held to be doubly efficacious if writ in cyphers, a point on which the *Pistis Sophia* gives much doubtlessly very valuable information. "This," it reads, "is the Name of the Immortal One: AAA WWW, and this is the Name of the Voice through whose means the perfect man is moved: III. These, likewise, are the interpretations of the names of the Mysteries. The first is AAA, the interpretation thereof, ΦΦΦ. The second which is MMM, or which is WWW, the interpretation whereof is AAA. The third is ΨΨΨ, the interpretation where-

of is O O O. The fourth is $\Phi \Phi \Phi$, the interpretation whereof is N N N. The fifth is $\Delta \Delta \Delta$, the interpretation whereof is A A A, the which is over the throne A A A. This is the interpretation of the second A A A A, which is A A A A A A A A, and the same is the interpretation of the whole Name."

With this singularly lucid explanation of the matter, I leave reluctantly the subject of Gnostic inscriptions. It is quite easy to understand that no demon could long beset the soul of the adept whose body was protected by such a talisman and who possessed the knowledge to use it properly and address the proper prayers to the right Powers by their secret names. For much more of the same kind there is always Dr. King's work.

Geometrical figures, the triangle, square and rhombus, also occur and have been interpreted variously but never quite conclusively, save that the last named is supposed to stand for the Egg of the World, brought down from the Orphic theogony. For notation the Phœnician numerals were sometimes used; 1 to 9 being shown by vertical strokes, 10 by a horizontal one and 20 by two parallel horizontal strokes, sometimes curving together a trifle. Sometimes, again, certain angular forms indicate the use of the Egyptian system which represented 10 by Γ and 100 by the same four times repeated in the form of a square, \square , but it is probable that in most of the cases where any enumeration was desirable it was effected by the use of the numerical values of letters.

An interesting application of Gnostic ideas was the not uncommon addition of an inscription to an ancient gem with the intention of creating or increasing its talismanic power. As an example of this practice I have a burnt sardonyx with a rather well done figure of Victory dating from early Imperial times, on the back of which has been cut the great name, **Ab-rasax**.

I am conscious that I have cast a very flickering illumination on this subject, supposing any illumination could be cast, but the enormous mass of material and its heterogeneous character make it impossible in a work like this more than to fa-

miliarize readers with the general nature and character of the engraving on these stones. Should he feel sufficient interest to delve deeper, and possess a mind sturdy enough to stand the strain, he will, at least, know that he is studying the strangest, weirdest system of religion and philosophy which the human intellect has ever evolved, and, conversely, he will be able to realize what that much vaunted intellect is capable of when once it cuts loose from the moorings of sanity.

I will close this chapter with the only allusion to an "artist" which I have been able to find later than the times of Evodos. In the *Paradise of the Holy Fathers*: stories of holy men, by Palladius, there is an amusing anecdote told of Abba Macarius (or Isidore), that might give points to some of our clerical exhorters of the faithful to give bountifully. There was a certain rich woman of Alexandria who appears to have been rather lax in the matter of contributions, and Macarius undertook to loosen her purse-strings. The narrative reads: "From his youth up he had been a skillful workman in the cutting of gems, and he went to her and said: 'Certain very precious smaragdi and gems have fallen into my hands, and whether they have been stolen or not I do not know'" (a delicate touch), "but the man who hath them will sell them for five hundred dinars.'" Attracted by the opportunity, the lady pays him the money, whereupon the reverend gentleman fulfills his part of the bargain by exhibiting to her a company of beggars and the like, as his "emeralds" and "gems," upon whom he has expended the five hundred dinars in alms. It is not probable that Macarius ranked any higher as an artist than he did as an abstract moralist, but the incident shows that "skillful workmen," according to the estimate of the times, were known as late as the end of the fourth century, the date of this brilliant coup.

CHAPTER IX

BYZANTINE, SASSANIAN AND MOSLEM GEMS

BYZANTINE GEMS

For the purposes of this book we may consider the Byzantine branch of the glyptic art as ranging from the division of the Empire, roughly speaking 400 A. D., down to the fall of Constantinople, in the middle of the fifteenth century. There is very little to be said for its merit. Though ancient gems were preserved, collected, and sold in Constantinople, their presence and inspiration had no influence whatever on the work of the time. This was, for the most part, religious or in the line of portraiture, and shows the stiff, soulless formality of which the term, Byzantine Art, has come to be a synonym. Far better than most of it is a picture of the Virgin and Child with the inscription, Η ΕΙΚΩΝ ΤΗΣ ΑΓΙΑΣ ΜΑΡΙΑΣ (The likeness of the holy Mary). It is much too large for a seal and was evidently intended as an ornament, perhaps of some church vessel. In fact the greater frequency of cameos shows that the signet idea was no longer the ruling motive in gem-engraving (See Pl. XXX, 8, 10, 11).

The inscriptions, like the one just quoted, are usually descriptive, and the spelling and lettering are decadent.

SASSANIAN GEMS

It is when we go a step farther toward the East that we find some attempt to preserve and even to revive the traditions of gem-engraving. Under the native Persian Sassanian dynasty which overthrew the more barbaric Parthian supremacy in Central Asia, the art flourished from the third to the seventh

century A. D., when the kingdom was conquered by the Moslems. It did not attain a high degree of merit but it was often respectable in a decadent way, and its popularity shows that in that part of the World the use of the gem for a signet still obtained.

MATERIALS.—The stones favored under the Lower Empire were popular here: green jasper, heliotrope, lapis lazuli, and hematite, also carnelian, sardonyx, and chalcedony, often of the bluish tint known as sapphirine, and, along with these, a considerable number of fine garnets, hyacinthine and almandine, usually cut convex, as throughout all the good periods of the art in Europe. The amethyst is very rare, but perhaps the finest example of Sassanian work is on that stone: the famous Devonshire portrait, which has been identified as several Sassanian kings.

TECHNIQUE.—The character of the work on these stones may be described, primarily, as sketchy, done, as a rule, with broad, hastily cut wheel-strokes and occasional drill borings. It is lacking in strength, exactness or distinction, but it has a certain decorative quality, especially in its expression of the floating effect in the delineation of garments. Little interior polish is usually found. The shape of many of the stones was a modification of the older conical form into the segment of a circle, usually more than half, with the picture on the flat surface. Often this was compressed into a sort of thick ring shape with one side flattened and a much larger boring. Equally numerous were ring-stones, flat or convex.

SUBJECTS.—The subjects chosen for the pictures on these gems are, for the most part, local in their character and types, although there are evidently occasional inspirations from late Roman art, such as rare figures of Victory. Generally speaking, the culture of the kingdom strove to reach back to the old Persian traditions. Deities are never figured, for the Zoroastrian had an antipathy to anything resembling an idol, but there are sacerdotal types, such as fire altars or priests sacrificing at or praying before them. The monster types of early Oriental art occur repeatedly; human-headed bulls and horses

with wings, winged lions, a lion with scorpion's claws and a serpent tail, pegasi, griffins—all the fabulous creatures of the archaic times. The frequent introduction of the tree of life is, also, an evidence of the tendencies, and flowers are occasionally shown. With these are found the numerous astrological symbols to be expected under Magian supremacy, signs of the Zodiac, stars, suns, and crescents. What King describes as the national standard, a crescent, set above a bar or ball, between two horns and supported on a tripod (?), but which seems, often, more like some conventional fire altar motive, is so common that he supposes it to have been the usual seal of certain military officers (Pl. XXX, 5). Paul Horn and George Steindorff, in their work on *Sassanian Gem Signets*, call it a monogram, but its frequency in approximately the same form and often with an inscription, seems to me to argue against this interpretation.

Representations of animals are perhaps the most abundant of all (Pl. XXX, 1), but they are seldom drawn naturally or executed with any spirit: bulls, always of the Hindoo hump-backed type, horses, wild sheep and goats, boars, lions, tigers, wolves, foxes, bears, antelopes, stags, often couchant or lying down with the head turned around, eagles and other creatures. The heads or busts of beasts also occur (Pl. XXX, 4) and a few royal hunting scenes (Pl. XXX, 2). Women are often pictured, sometimes with children (Pl. XXX, 3), but, most interesting of all the subjects and more frequent than all, save the animal types, are the portraits (Pl. XXX, 6, 7), so many of them evidently of kings and satraps that the complimentary motive in the matter of signet devices is strongly in evidence. These portrait busts rarely suggest a very close likeness but there is generally an attempt to portray the elaborate dressing of the hair, the fillet and, often, some sort of tiara, though seldom the characteristic royal *cidaris* found on coins and somewhat varied by each monarch so that the shortcomings in portraiture might be compensated for. Still, much may be learned from the hair arrangement, and the inscription of the name and titles of the prince often gives a needed clue. Peculiar

liar is the care with which the large pearl pendant from the ear is usually rendered.

INSCRIPTIONS.—Fortunately these are very common on Sassanian gems. Rarely the Greek letters are used, on a few Sassanian Christian stones to be referred to later. Almost universally the writing is in some form of the more or less flowing Pehlevi characters that, with the regaining of Persian freedom, succeeded the Greek alphabet affected by the Parthian conquerors. The scarcity of the proven glyptic remains of the latter can probably be accounted for on the presumption that their gems cannot be distinguished from poor examples of late Greek work. As on their coinage, they, doubtless, used the conventional Greek types.

To return to the Pehlevi inscriptions, the language was first deciphered by De Sacy, but many of the readings are uncertain and few if any of our readers will probably have either the knowledge or the patience to work it out, even sufficiently to understand the rather limited scope of the gem legends: the names of the owners or of the princes whose likenesses are found, together with such titles as "The Just," "The Merciful," "The most humble servant of the gods," "King of kings," "Savior of Mortals," etc. They sometimes begin with four letters variously read "apad" or "afzud" ("The Most High" or "Long live.") One reads, "Artashetran Rami Minocheter" ("Rami, son of Artaxerxes of the Divine Race.").

The most usual form of the alphabet found in Pehlevi inscriptions contains three long vowels, A, I and U, and eleven consonants, B, D, H, K, L (or R), M, N, P (or PH), S (or SH), T and Z. The short vowels, as is usual in Oriental writings, are to be supplied by the readers. Letters are generally united, two, three or even more, in a sort of script which becomes more definitely script-like and more difficult to read as the period advances. Those who desire to understand the inscriptions on their gems should take them to the best orientalist within reach and curb their very probable disappointment if he fails them.

SASSANIAN CHRISTIAN GEMS.—When the orthodox party

gained control in the Eastern Empire they promptly put in practice the lessons in persecution taught them by a few of the earlier Pagan rulers. The heretical sects were numerous and among them were the Nestorians, many of whom sought and received asylum in Persia.

Thus the cross is found engraved on Sassanian stones, sometimes rebus-wise and with other symbols, and Chabouillet notes a number of religious picture subjects, such as the sacrifice of Abraham, the Virgin seated with the infant Jesus in her lap, the meeting of the Virgin and St. Elisabeth—a somewhat doubtful interpretation, I think, of a well known gem, and, also, most notable of all, a beardless bust-portrait of Christ in profile with a fish beneath it and bearing the Greek inscription, ΧΡΙΣΤΟΥ. The stone is a truncated cone of white chalcedony. Inscriptions are sometimes in Greek, sometimes in Pehlevi.

FORGERIES.—Before leaving the subject of Sassanian gems, I quote from an article on *Forgeries of Assyrian and Babylonian Antiquities* in Vol. III (1887) of *The American Journal of Archaeology*, by M. Joachim Ménant. He writes, "At Teheran the Sassanian engraved stones have long been systematically imitated. The types of the Sapers and Ardeshirs have been exploited with a skill so remarkable as to deceive the most practiced eye. These works would not come within the limits of this inquiry were it not that it has often been attempted to pass them off for portraits of Achæmenid princes, and they are provided with cuneiform inscriptions." Of two schematic wood-cuts of examples, he says: "The work, quite modern in appearance, seems to have been executed hastily, though the engraver was fond of details . . . Although certain technical details show the hand of the modern workman, the intaglios might have circulated as portraits of Ardeshirs and Sapers had it not been that the forger engraved around each figure an inscription in cuneiform characters in which he stands convicted."

On its face this seems rather disturbing, though if the gems looked anything like the drawings M. Ménant gives I cannot imagine their deceiving anyone but an ignoramus. Also I can-

not but feel that M. Ménant might have been misled as to the prevalence of the practice. The demand for gems of the Sassanian type could not have been very active among the rich collectors who made forging worth while, save, perhaps, in the cases of a few specialists. The dilettante wanted, primarily, art and beauty in the objects of his desire, and few would be apt to venture deeply into the Sassanian field for other than purposes of study and research. To deceive such specialists is, of course, the most difficult of the forger's tasks. We must admit that the cutters of Moslem signets have always had enough skill to copy such Sassanian work as might come into their hands and that the imitative trait of the Oriental makes him an accurate and painstaking copyist, free, theoretically at least, from the spirit of independence that usually tempts the European forger to some trifling touch of damning originality; yet, if this were the practice why should not the inscriptions be reproduced as faithfully and as irrefutably? I hold there is no safety in fraud save in an absolute copy properly cut on a properly chosen and properly treated stone and, aside from the inherent improbability of M. Ménant's peril being as great as he pictures it, he seems to me to be on the horns of a dilemma. His forgers *did* show all the stupidity of their kind, and were not content to copy. That there may be some clever forgeries in this line I would not deny and, in view of the less knowledge we possess of both the authentic types and the ways and work of their imitators, these forgeries may be more dangerous than equally clever efforts at imitating Occidental gems. This, however, spells ignorance on the part of would-be experts, and what is our own fault can usually be remedied.

LATER MOHAMMEDAN GEMS

Perhaps here, too, is the best place to refer to the large class of inscription signets which have been made and used in Western Asia since the Moslem supremacy. Very rarely are figures found on these, since such portrayals were contrary to the spirit of Islam which has carried its morbid dread of

idolatry into the field of its art. Ancient gems were, doubtless, kept as talismans by the less strict religionists who sometimes even sought to increase their beneficial or nullify their malign power by adding a Koran text on the back.

Inscriptions, then, are, with the exception of occasional embellishment with flower and star designs, the whole of Moslem glyptic art, and the name of the owner with his titles, texts from the Koran, prayers, and pious axioms or ejaculations form the subject matter (Pl. XXXII, 1). The earliest are in the square, vertical Cufic letters, descendants, through Syria, of the early Pehlevi, but, after the thirteenth century, this gave place to the flowing Persian text, often complicated and obscured by elaborate flourishes. It is with this latter that we find, also, the star and flower ornamentation.

In the matter of mechanical execution these gems are admirably engraved. No elegance of the curves seems to trouble the craftsmen, and the effect, from a decorative standpoint, is often very pleasing. Save for a few hemispherical shapes that continued for a short time after the Sassanian collapse, the Moslem gems are ring-stones, for the most part coarse load-stone, more or less fine carnelians, jaspers and sards, together with a few rubies. These are cut flat and are round, square, usually with somewhat rounded corners, or octagonal. At the present day most Turks have their signets cut in metal, but some who can afford it still wear the carnelian ring-stone, and the art of engraving it has never died out.

RABBINICAL GEMS

From the same regions, also, comes a small class of gems bearing inscriptions, mostly names, in Rabbinical lettering and, generally, without other engraving. They were undoubtedly the seals of Hebrews, and some of them seem to be of very considerable though rather indefinite antiquity.

CHAPTER X

GEMS IN MEDIÆVAL EUROPE. THEIR USE AND MANUFACTURE

HAVING concluded our summary of the trend of glyptic art in the East, we may now turn to Mediæval Europe.

It has been loosely stated that, when the repeated waves of Northern invasion swept over and, at last, submerged the Western Empire, it was the practice of the barbarians, "who valued only the precious metals," to break engraved gems from their settings and throw them away, so as to consign the latter to the melting pot. This idea is inaccurate and has probably had its birth in a desire to explain the fact that few gems are found in the original rings. Most of the barbarians were not quite barbarous enough for that. Service in the legions and contact with the borders and outskirts of Roman culture had taught them Roman valuations, and they were not likely to regard as worthless what their rich and envied, if despised, neighbors held precious. Probably they found little practical use, at first, for gems as signets, but even in such races as the Huns there must have existed that belief in talismans and amulets common to all rude peoples, and beautiful stones bearing strange figures and signs were sure to be looked upon as possessing this character. The knowledge that must have dwelt in even the densest ignorance that the cultured owners had held them things of price would be construed by the looting barbarian in the light of his own predilections. Moreover it is easy to explain in a much more plausible way the great proportion of unset gems that are found. The settings, at the best, were much more perishable than the gems, and numberless vicis-

situdes combined to destroy them. As anyone can realize who wears a signet and uses it constantly, merely drawing the gold ring on and off will necessitate its renewal several times in a life, especially when the metal is of a high purity, while many of the substances, such as iron, of which many rings were made, often with but a thin plating of gold, disintegrated from mere time or contact with the earth salts. This for the vast number that were lost or buried. Again, many were taken from the settings to be reset more in accordance with the taste of their new owners, and, above all, it is certain that in ancient times the stone was much less firmly fixed in the bezel than to-day, usually with the aid of some sort of cement which would lose its hold with time. Traces of this and sometimes of the corroded metal itself are found on the backs of gems and the desire to remove these explains the fact that the backs of stones are often found repolished, even when the modern finder or owner has had sense enough to leave the face intact.

This view of the matter, however, is not based on theory alone. From the earliest Mediæval times positive evidence is at hand. Among the articles found in the Longobardic necropolis of the seventh century A. D., at Castel Trosino, and preserved in the Museo delle Terme at Rome, I found three ancient intaglios set in rings and four in brooches, all of Longobard workmanship.

At a later Mediæval period, one of the commonest uses for ancient gems was for the ornamentation of church plate. That of the Troyes Cathedral was adorned with nearly three hundred, most of which, small carnelian intaglios, were taken by the Crusaders at their capture of Constantinople and were used to decorate a small shrine which contained a tooth of St. Peter. The shrine of the Three Kings at Cologne, twelfth century work, was adorned with two hundred and twenty-six ancient gems. The shrine of Elizabeth of Thüringen and Hesse at Marburg, made about 1250, contained eight hundred and twenty-four precious stones, many of which we know to have been intaglios. Evodos' portrait of Julia, daughter of Titus, was preserved in the Trésor de S. Denys, and there are many other

records of such an application at times when all sorts of precious things were lavished upon the Church.

Even more general, however, was the use of the ancient gems as signets by whoever might need them, from the king down to the smallest land-owning nobles and ecclesiastics.

Before the tenth century, when the use of seals cut in metal became popular, the ancient stones must have been even more in demand. Charlemagne used an ancient head of Marcus Aurelius and, later, one of Jupiter Serapis; Pepin le Bref, a figure of the bearded Dionysos; Pepin duc d'Aquitaine, a portrait of Caligula; Carloman (764 A. D.), a female bust with hair in knot, probably a Diana; Louis I (816 A. D.), a portrait of Antoninus Pius (or Commodus); Lothaire (840 A. D.), a portrait of Caracalla, and Eadgar, king of the Angles (860 A. D.), an ancient portrait head, diademed, probably of some post-Alexandrian Greek prince. There are many other examples and, in some cases, it is probable the seal was selected because of a fancied resemblance to the person who chose it. In others, such as both the Jupiter Serapis and Marcus Aurelius heads worn by Charlemagne, it is pretty certain that they were regarded as heads of Christ, in accordance with a theory of Mediæval interpretation to which I will refer later.

Among ecclesiastical signets a curious example is the choice by Seffrid, bishop of Chichester (1159 A. D.), of a figure of the Abraxas god, for his episcopal ring. Probably its supposed efficiency as an amulet was too much for the worthy churchman, but the Venus bust, seal of the Archbishop of Sens (twelfth century), seems even more inappropriate.

The commandery of the Hospitallers at Venice had for a counterseal the goddess Ceres, enthroned, holding wheat ears and a cornucopia, and there is the case of the monks of Durham who placed the head of Jupiter Fulgurator on their common seal, as being the portrait of their patron, St. Oswald.

Even together with the large metal official seals, gems were still eagerly sought as counterseals and personal signets. W. de G. Birch, in his work on seals, gives a large number of instances of bishops and high church dignitaries of the twelfth

and thirteenth centuries whose counterseals were ancient gems. Among these were Theobald of Canterbury, who sealed with the bearded head of a god or emperor, and Stephen Langton of Canterbury, with two Cupids, one of whom is climbing a tree with the aid of a ladder. It would be interesting to know just how he interpreted the subject. Mr. Birch mentions in all something less than one hundred of these stones, thirteen of which he describes as Gnostic or grylli, eight as early Christian, and, among the rest, four Fortunas, three Athēnas, two Victories, single examples of Ceres, Hermēs, Cupid, Hercules and the Lion, Omphalē, a hippocamp, a biga, and numerous portrait heads and pictures of animals. To some he does not undertake to give attributions, and it is, of course, possible that, the subject of ancient glyptics not being especially his own, he may not always attribute correctly. G. Demay, in his introduction to *Inventaire des Sceaux de l'Artois et de la Picardie* and his *Les Pierres Gravées dans les Sceaux du Moyen Âge*, mentions more than three hundred ancient gems, including figures of Jupiter, Isis, Mars, Apollō, Æsculapius, Minerva, Venus, Mercury, Bacchus, Hercules, Diana, Victory, Fortuna, Medousa, Pēgusus, Omphalē, Abraxas, fauns, centaurs, genii, animals, grylli, and portrait heads. In the chronicle of Jocelyn of Brakelonde it is told how Abbot Samson of St. Edmundsbury found his monks pledging with their seals the credit of the monastery for their private debts. Deciding to stop the practice, he ordered all seals surrendered and gathered in thirty-three. These certainly were not the big metal seals of the time (1180-1200 A. D.). Nothing save ancient gems could have been within the reach of these good brothers to serve for such pious ends, and the instance goes to show the number and obtainability of such stones. Again, in the Beroult fragment of *Tristan*, Isolde says: "Friend Tristan, I have a ring: a green jasper with a seal."

To the Mediæval mind the ancient gems were "Pierres d'Israel," works executed by the Jews when wandering in the wilderness, and its interpretation of the subjects according to the prevalent ideas of the times makes one of the most

curious chapters in the history of these stones. Most winged figures, Victory, Cupid, etc., were held to be angels, Jupiter with his eagle was readily susceptible of interpretation as St. John the Evangelist, Jupiter Serapis was Christ and is probably the origin of the conventional likeness adopted by Byzantine art, while Caracalla, with his curly locks and surly expression, was generally considered a likeness of St. Peter. Veiled female heads were Madonnas and Magdalenes; Isis and Horus, the Virgin and Child; Thalia with her attribute mask was Herodias with the head of John the Baptist. Figures with the shepherd's pedum were abbots bearing their crooks, combinations of three masks suggested the Trinity, and, most humorous of all, Lēda and the Swan was held to be a representation of the Holy Ghost descending upon Mary, in the form of a dove:—all were translated along kindred lines by the eager and ignorant religionists of the times.

Passing from the use of ancient gems to the work of the Mediæval gem-cutters themselves, it has been the fashion to maintain that the art died out completely in barbarianized Europe, save for a few rather large rock-crystals engraved with crucifixions and other religious subjects, such as a Susanna and the Elders, shown in different scenes. This is of ninth century workmanship. It is now in the British Museum and was anciently used as a brooch to fasten the pontifical robes of the Abbot of Vézor on the Meuse. Even the few that are known show that the art was not dead, and the general use of ancient gems, together with the virtues attributed to them, indicates that there must have been a demand for such work. Also there is presumptive evidence in the works of Mediæval writers, as when Alexander of Tralles in the sixth century and Marbodius in the eleventh give directions as to the engraving of certain subjects on the appropriate stones. The last named directs that a vine entwined with ivy should be cut on the sard, a lobster and raven on the beryl, Mars and Virgo holding a branch on the chalcedony, etc.

Circumstantial evidence contra is that the character of the work of the times is unmistakable and the gems themselves

are not in evidence, against which may be argued their probable comparative rarity, owing to the cost, and the few individuals who had a preference for contemporaneous work and the money to pay for it.

There is, however, direct evidence that the position taken by King and many writers and not refuted by Furtwängler is, at least, much too broadly stated. Lecoy de la Marche, in his work on *Seals*, cites a signet used at one time by Lothaire, bearing a bust in full face with long hair hanging on each side, the whole being of the exact type found on the metal seals of the Merovingian kings, from whose period it may date. Another, also used by the same prince, was evidently of contemporaneous make: a portrait of himself done in rock-crystal.

Beyond this we have seal impressions from Carlovingian times, many of which show by their sharpness and clearness as well as by the indications of the setting that they were made from gems rather than from designs cut in metal, and when we examine the subjects chosen and the characteristics of the art it becomes clear that the engraving on not a few of these was of the period of the sealings themselves.

From the tenth century on we find many examples of this. Conrad, King of Arles (940), seals with a portrait bust, evidently of contemporary cutting; Raoul and Jean de Nesle, Counts of Soissons (1115, 1262), Pierre de Longueville and Henri d'Apremont (1331), all seal with gems bearing the engraving of a horseman with a gonfalon; King John of France (1362), with the letters I R F (Johannes Rex Francie) surmounted by a crown; Marguerite de France, widow of Louis I, Count of Flanders (1367), with an heraldic lion; Amedée VI, Count of Savoy (1369), with an heraldic field of crosslets; Jean, Count of Vendome, with two winged and nimbus-crowned angels; Gilles de Hallu, with a cavalier holding a lance, and Guillaume de Montclar, with a cavalier armed with a sword, the horse being covered with housing. These are given by Demay, in his work on engraved gems used as seals in the Middle Ages. He describes, in all, 367 impressions from gem seals, of which 341 are from antique gems and 26 attributed to gem work of

the period. Of these latter, 15 are bust portraits, some of which are, perhaps, less convincing than the examples cited above, which could not possibly date from earlier times.

Gori says that, before 1300 A. D., the Florentines used two gem seals: one, cut in a large plasma, for public documents, a Hercules, who figured as one of the supporters of the city arms; the other, small, for letters, bore the Florentine lily. The former was probably and the latter certainly of Mediæval workmanship.

Many of the gems mentioned in ancient texts and quoted by de la Marche, while convincing as quoted, must always be open to the suspicion of Mediæval interpretations, though the sapphires of Charles V (1368) bearing, one a K surrounded by fleur de lys, and the other, a picture of the king mounted and the arms of France are, of course, beyond doubt. The same is true of such later examples of Gothic art as the sapphire engraved with a Madonna head, claimed on superficial reasoning to have been the signet of Matthew Paris (Pl. XXX, 9); another Madonna in full face, on a European carnelian, found in Suffolk; the signet of Jean sans Peur, Duke of Burgundy—his arms engraved on a pale sapphire; a rectangular spinel, bearing a youthful head in full face with a crown of three fleur de lys, among the Marlborough Gems, and many others the dates of which may be set around the fifteenth century, on the verge of the revival of the ancient arts which was to produce the splendid work of the Renaissance. Also, from the beginning of the fourteenth century we have the signet found in the tomb of Bitton, Bishop of Exeter: a sapphire engraved with a hand with the thumb and two fore-fingers extended, as if in episcopal benediction.

There is, as I have said, no claim that hard stones were engraved in any considerable number during these periods. The supply of ancient gems and the vogue of large metal seals bearing figures and legends checked this and left the demand for contemporary subjects to be inspired only by luxury or whim. What is established is that the art itself never died out in the West, and that, when the spirit of the Renaissance called

for its revival, the forerunners of the accomplished artists to which that influence gave birth were not all Byzantines as has been supposed. (See Pl. XXX, 10, 11.)

I have already referred to the term, "Pierres d'Israel", which voiced the Mediæval belief in the origin and the magical powers of ancient engraved gems, but we should not leave this period without a fuller notion of the place they held as medical amulets and as talismans. Though this element was always pretty generally recognized, there is no other period of which we have much knowledge when the most intelligent thought of the World received the idea so unreservedly. In classical times there were always a few clear-minded thinkers who doubted, as does Pliny while he records the belief of his age, or laughed in his metaphorical sleeve, as we feel Hippokratēs must have done when he stated that he found the efficacy of amulets in the cure of disease much increased when they were used together with the regular remedies.

With the rising flood of barbarism and the drowning out of an already decaying classical culture, all vestiges of sanity seem to have vanished. Gnosticism had helped pave the way, and we find the learned of all professions formulating beliefs with a minute accuracy that does credit at least to their imagination and to their diligence in research.

In the sixth century, the physician, Alexander of Tralles, recommends, in his work on therapeutics, a ring engraved with a picture of Hercules conquering the Nemean Lion, as a protection against stomach-ache (Pl. XXX, 12). Certain of the so-called lapidaria were ascribed to Solomon, Chael, Ragael and other wise Hebrews, historical and apocryphal, and a collection was published in 1502 by Camillo di Leonardo. The work of Thetel or Cethel, an imaginary Jewish philosopher, included in J. B. Pitra's *Spicilegium Solesmense*, gives a good idea of the nature and scope of the superstition and is well worth quoting from.

"Of the greatest potency," says the learned Thetel, "are the following figures on their appropriate stones:

1. When is found a jasper and on it a man who has a

shield on his neck or in his hand and in the other hand a spear and under his feet serpents" (The Abraxas god, of course) "it gives power over all enemies.

2. When is found on a stone a man flying, that is to say, with wings, that stone has power in business dealings.

3. When is found on chrysolite a woman having in the one hand a bird and in the other a fish it has power in business dealings.

4. When is found on a stone a *turtur*" (either a kind of bird or a sting-ray) "with an olive branch, this has power that you will be well regarded by all.

5. When you shall find on a stone a serpent and an archer fighting, this has power to bring about peace.

6. When is found on a white stone the one half the figure of a woman and the half part the figure of a fish which holds in the hand a looking glass and an olive branch, set in gold and held in the hand, it has power that one carrying anything shall not be deprived of it.

7. When you shall find a green jasper and on it a cross, it has power that one carrying anything shall not be drowned.

8. When is found on a stone a basilisk and a siren, that is to say, half woman, half fish, it has power that you shall be able safely to walk among serpents,"—and so on through some thirty odd receipts.

Dr. King quotes from a work attributed by Camillo to Solomon but undoubtedly also a product of Mediæval erudition. It is thus introduced:

"In the name of the Lord. This is the precious book which the children of Israel made in the Wilderness according to thy name, O Lord, and according to the course of the stars."

Such a preface is quite sufficient to locate the authorship. Here is the list of magic-working devices:

"1. Old man seated on a plough is thus proved. Take clean black wool undyed and wrap up the stone therein; place it among wheat straw and lie with thy hand upon it: thou shalt see in thy sleep all the treasures of the kingdom in which

thou art and how to obtain them. Water in which it has been steeped cures all diseases of cattle.

2. Man with helmet on his head, shield hung round his neck and sword raised on high and trampling on a serpent" (Perhaps also suggested by Abraxas gems) "engraved on jasper; hang round thy neck and thou shalt not fear any foe, yet be not thou slothful. In all things shalt thou be victorious, especially in war. It ought to be set in brass.

3. Horse, with a cockatrice or crocodile on his back, on a jacinth is of power in all conferences and debates; and wearing it thou shalt be loved by all, both man and beasts. It must be set in gold." (See Pl. XXIX, 28.)

"4. Man seated and a woman standing before him with her hair hanging down to the thighs and casting her eyes upwards: this engraved on carnelian hath the virtue that every man and woman touched therewith will immediately become obedient to thy will in all things. It must be set in gold weighing as much as the stone itself and, under it, the herb betony and ambergris.

5. Horse, with rider bearing a sceptre, on amethyst, renders all princes and nobles obedient to the owner. It ought to be set in twice its weight of gold or silver.

6. Horned animal having under him a horse which drags behind him half a goat gives the power of taming all beasts and must be set in lead." (A gryllus.)

"7. Bird with olive leaf in its bill, cut on pyrites and set in a silver ring. Having this on thy right hand thou shalt be invited to every feast and those present shall not eat but shall gaze upon thee." (Early Christian subject.)

"8. Scorpion and Sagittarius fighting together on any stone. Set this in an iron ring and if thou wishest to prove its efficacy impress it on wax and whomsoever thou shalt touch therewith they shall immediately quarrel.

9. Ram with the half figure of an ox on any stone. Set in a silver ring and whomsoever thou shalt touch therewith they shall immediately be reconciled to one another.

10. Woman, one half fish, holding a mirror and a branch.

Cut on a marine hyacinth, set in a gold ring and cover the signet with wax and wear on thy finger; and when thou wishest to go anywhere and not be seen, hold the gem tight within thy palm and thou shalt have thy desire.

11. Man ploughing and over him the hand of the Lord making a sign, and a star. If cut on any stone and worn in all purity, thou shalt never perish by tempest nor shall thy crops receive damage from storms.

12. Head with neck, cut on green jasper, set in brass or iron ring engraved with the letters B B P P N E. Wear this and thou shalt in no wise perish, but be preserved from many diseases, especially fever and dropsy. It likewise gives good luck in fowling. Thou shalt also be reasonable and amiable in all things: in battle and in law-suits thou shalt be victor. It aids women in conceiving and in child-birth, it gives peace and concord, and many good things to the wearer; but he must do so in all justice and honesty.

13. Basilisk or Siren, half woman, half serpent. With this on any gem thou shalt be able to touch any venomous creature without hurt.

14. Basilisk and dragon entwined together on carnelian, and also a bull's head. Put it around thy neck when thou wishest to fight with any beast of the wood or of the sea and they shall quickly be conquered.

15. Man naked and bloated, crowned and holding a cup and a branch; if cut on jet, set in any metal, and anyone having a fever and wearing this shall forthwith be cured.

16. Man with bull's head and eagle's feet, on any stone; make an impression thereof in wax and so long as it is upon thee no man shall speak evil of thee.

17. Man standing and tall, holding an obolus" (*patera*) "in one hand and a serpent in the other, with the sun over his head and a lion under his feet. If engraved on a *diadochus*, set in a leaden ring and put underneath wormwood and fenu-greek. Carry it to the bank of a river and call up whatsoever evil spirit thou pleasest, and thou shalt have from them answers to all thy questions.

18. *Aquarius*, on a green turquoise: the wearer shall have good luck in all his buying and selling so that buyers shall seek after him." (This may be enthusiastically recommended as a signet for a traveling salesman).

"19. Youth having a crown on his head and seated on a throne with four legs and under each leg a man standing and supporting the throne on his neck, round the neck of the seated figure a circle, and his hands raised up to Heaven. If cut on a white hyacinth, it ought to be set in a silver ring of the same weight as the stone, and under it put mastic and turpentine. Make the seal in wax and give it to anyone and let him carry it about on his neck or person, either the wax or the ring, and go with pure mind and chastely before king, noble or wise man, and he shall obtain from them whatsoever he may desire.

20. Man seated on a fish" (Note the Taras riding a dolphin on the Tarentine coins) "cut on red jasper, being put upon the dress of anyone at a feast when eating with his right hand, he shall never be satisfied,"—(Surely a joyous prospect for the guest!).

"21. Bearded man holding a flower in his hand, cut on a carnelian and set in a tin ring, the ring being made at the change of the moon on a Friday, the 1st or 8th of the month, whomsoever thou shalt touch therewith he shall come to do thy will.

22. Serpent with a man on his back and a raven over his tail, engraved on any stone, makes the wearer rich and crafty.

23. Man standing on a dragon, holding a sword, must be set in a leaden or iron ring; then all the spirits that dwell in darkness shall obey the wearer and shall reveal unto him in a low-toned song the place of hidden treasure and the mode of winning the same.

24. Man riding and holding in one hand the bridle, in the other a bow, and girt with a sword, engraved on pyrites. Set in a gold ring it will render thee invincible in all battles. And whoever shall steep this ring in oil of musk and anoint his

face with the said oil, all that shall see him shall fear him and none shall resist.

25. Man erect, in armor, holding a drawn sword and wearing a helmet, if set in an iron ring of the same weight renders the wearer invincible in battle." (Regular hero type).

"26. Man bearing in his hand a *mutatio*, cut on *euchilus*, makes the wearer to be feared and respected by all people.

27. Winged horse, on any stone, is the best for soldiers and gives speed and courage in battle. It also preserves horses from all diseases as long as they have it upon them." (Pegasus.)

"28. Serpent twined around a bear, on any stone, makes the wearer cunning and steady of purpose.

29. Hercules holding a club and slaying a lion or other monster, engraved on any stone gives victory in battle." (A quite different influence from that claimed by Alexander of Tralles).

"30. Tree, vine or wheat-ear, on any stone, makes one abound in food and clothing and to have the favor of the great." (Typical symbols).

"31. Mars in armor or a virgin in a long robe, with a vestment wrapped about her and holding a laurel branch, cut on jasper, makes the wearer successful in all undertakings, defends him from violent death and drowning and all accidents.

32. Mars, that is a figure holding a lance, on any stone, makes the bearer bold, warlike and invincible.

33. Jupiter, the figure of a man with a ram's head, on any stone, makes the wearer beloved by all creatures and to obtain whatever he may demand." (Possibly the figure of Jupiter Ammon).

"34. Capricorn, on a carnelian. Set in a silver ring and carry about with thee, thou shalt never be harmed in purse or person by thy enemies, neither shall a judge pass an unjust sentence against thee: thou shalt abound in business and in honor and gain the friendship of many, and all enchantments made against thee shall be of none effect and no foe, however powerful, shall be able to resist thee in battle."

An interesting thing to note in these lapidaria is that,

while there is often a suggestion in the subjects of the special benefit to be gained from the gem, there is also very frequently a curious mixture of the main purpose with some incongruous triviality. Another point is that, of the last list, 1—10, 12, 15, 16, 18, 20, 21, 25, 26, 27, and 29—34 may be subjects found on classical signets. Of the rest, while we often find what may be a partially antique picture, some discordant feature is introduced which means either that the stones must have been engraved in the Middle Ages or else that the exponent of the idea tried to prescribe something that would be difficult or impossible for his disciples to obtain. The latter seems improbable in view of his acceptance of such common devices as the Pegasus, wheat-ear, Mars, and Hercules. The preference for the jasper shown in the lapidaria shows that special magical properties were believed to reside in that stone, a superstition that ran back, doubtless, to late Roman times and is in line with the vogue of the green and bloodstone varieties for Gnostic and other talismanic engravings.

Typical of later Mediævalism and coming down through the Renaissance, there is a natural recrudescence of the astrological talismans of the Empire. These are generally not difficult to distinguish from the earlier work, since they took their ideas directly from the Arabian astrologers and from their evidently hazy notions of Egyptian beliefs, instead of accepting the Roman siftings. It is probable that the Mohammedan sages, influenced by their religious rule against human and animal pictures, invented our present day almanac signs of planets and constellations. Where these are found on gems the inference of Mediæval or Renaissance origin is definite. Of other substitutions, they indicated Gemini by two peacocks, Virgo by a wheatsheaf, Aquarius by a mule carrying buckets, Ophiuchus by a stork, Andromeda, a sea-calf and Engonasin, a saddled camel. Where modern Hebrew letterings are found on a gem, the proof, too, is, of course, obvious.

Camillo di Leonardo, writing about 1500 but evidently compiling his data from much earlier beliefs, propounds at some length, the doctrine of trines and their influence, as, for

instance, of the first trine: that of fire and made up of Aries, Leo and Sagittarius, he teaches that its lords are Sol by day, Jupiter by night, and Saturn at dawn, and that, hence, a gem engraved with any one of the above signs is good against all cold diseases, such as lethargy, palsy and dropsy, makes the wearer eloquent, ingenious and cheerful and exalts him to honor and dignity. The figure of the lion, as symbolizing the house of the Sun, is the most potent.

Scaliger, writing in the second half of the sixteenth century, gives, as borrowed by the Arabians from the ancient Egyptians, a catalogue of strange figures and groups as expressing pictorially the influence of each of the thirty degrees in every sign upon the horoscope of one born under it. Although, occasionally, these groups suggest designs on the talismans of the Lower Empire, most of them have an unmistakable Mediæval aspect, such, for instance, as a man holding a cross-bow in his right hand.

Altogether, since there was no attempt to forge or even to imitate directly in these stones, the atmosphere which surrounded their origin is pretty evident.

CHAPTER XI

GEMS OF THE RENAISSANCE

WITH the opening of the fifteenth century, the Quattro-Cento of the Italians, a new spirit comes to influence and, at last, control the intellectual development of Europe. Among the learned there had always been more or less study of such of the classics as were attainable, though, for the most part, the study was tinged with so strong a religious selection and interpretation that it had availed but little in lines of general information or culture.

Now, with the growth of intellectual curiosity and independence, the loosening of the bonds of church discipline and, above all, with the influx of scholars from the East and the manuscripts they brought, there arose what might almost be called a craze for the study of Greek and Latin and for the collection of everything that might throw light on the earlier civilizations of Greece and Rome. The fall of Constantinople let loose a veritable flood of ancient learning upon the receptive mind of Italy, the Pagan spirit with its love for beauty and art revived, and even the Papacy was carried along upon the stream. As for the laity, no petty despot in his hill fastness but came to consider his taste and culture an even stronger claim to his pre-eminence than the fraud or force that had won it. Of course much that was Mediæval survived during the first century of this development, but the trend was set, and both the evil and the good of barbarism were at last swept aside by the new-old thought and philosophy and tastes.

In such a movement it is natural to look for a revival of the art of gem-engraving among the earliest manifestations. The gems were already known and used, and learning shed a new light of understanding and appreciation. Each little stone

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carried its complete story of beauty or thought, where the statue fragment and the ruin were less attainable or available and held their legacies in trust for a later and more erudite archæology. Besides, the statue still had its value for the lime kiln, the ruin for the builder, and the love for art had to become both the saner and more definite before it could control the desire for material profit. The ancient bronzes, it may be said, were either buried deep in soil or debris or had gone long since to the melting furnace.

So it was that the collecting of ancient gems began almost as soon as did the collecting and reading of the manuscripts that reawoke the interest in them, and the impulse to rival their art gathered rapid headway.

During the earlier part of the Renaissance there is, as might be expected, a strong tincture of Gothic taste and Gothic stiffness, and it is difficult to distinguish some of the work from the output of an earlier age. With the revelations of the manuscripts, however, and the growing knowledge of the charm of classic fable and history, the artists turned to the reproduction of the subjects that had all the fascination of a new world for these precocious children. They copied much directly but they were too proud of their own achievements to copy with the aim of forgery (Pl. XXX, 13, 15, 17, 20; XXXI, 6, 8, 13), and the collectors of the time valued the work of their contemporaries too highly as such to tempt them very seriously in this direction. Thus it is that even their direct copies of gems and coins have in them so much of the spirit of the period that it is not difficult to place them, especially in the better class of work. Naturally the cameos attracted their emulation much more seriously than did the intaglios, and the demand for the former as ornaments was very great. We find a distinct reversal of the proportionate product, a proportion which has continued ever since. Genuine ancient cameos are very rare, but the output of Renaissance and modern times can be realized from the Somerville Collection at the University of Pennsylvania, largely modern examples, where they outnumber the intaglios at least three to one. Of course, intaglios were cut in considerable

numbers, both large and small, but the latter were usually for signets and often expressed contemporary ideas. When the artists worked for the art alone larger stones seemed to offer better opportunities, and, since there was no intent to deceive, there was no reason to bar such a selection, even had they realized its implication. When they did copy from the antique, on small stones, the subjects are apt to be either portraits or distinctly "pretty," such, for instance, as wrestling Cupids in active rather than conventional poses. When, as in the great majority of instances, they merely took ancient subjects and represented them in their own way, we find the unmistakable treatment which, beginning at this time, extended down to the decay of the art. Often their ambition impelled them to compositions of many figures (Pl. XXX, 16; XXXI, 1, 10—12), as in the Bacchic procession on the so-called signet of Michael Angelo (Pl. XXXI, 2), and always to dramatic poses or to pronounced action, often violent and very foreign to the repose and restraint we find in the bad as well as the good work of the Classic artists. This tendency finds its extreme development in the Poniatowski Gems to be considered on a later page. That the best Renaissance work is inferior to the best antique, does not reach its delicacy, lightness, certainty, and technical completeness, is somewhat a matter of taste and apt to involve observation of which only the practised eye is capable. That the artists lacked personality and originality is more obvious. Altogether, the danger of confusing it with good *original* engravings of still later times is much more serious than the risk of mistaking any of it, save the direct copies, for examples of the art from which it drew its inspiration. To summarize, the tendency was from a Gothic stiffness to the extreme of modern looseness, skipping over entirely the restraint in conception united with the freedom in execution which characterizes the ideal of Classic art and craftsmanship. A very high polish is also characteristic, and they repolished the surfaces of many ancient gems, much to their damage, though the claim that they retouched them does not seem to be authenticated to any wide extent.

To take up the history of the development which involves the names and work of individual artists, perhaps the earliest allusion is found in Scipio Ammirato's *History of Florence*, where he speaks of a unique engraver of intaglios in stone, named Peruzzi, as having forged, in 1379, the signet of Carlo di Durazzo. Nothing is known of the subject or of the other works of Peruzzi, though Dr. King assumes, without much reason, that Carlo's signet was not an antique. Doubtless the forgery was for other purposes than to deceive collectors.

Vasari writes of the fifteenth century: "The art of engraving on hard stones and precious stones was lost, together with the other arts of design, after the fall of Greece and Rome. For many and many a year it continued lost, so that nobody was found to attend to it, and, although something was still done, yet it was not of the kind that one should take account thereof" (Doubtless referring to the Mediæval Gothic or Byzantine art as opposed to the Classic ideas that were the rage in Vasari's day); "And, so far as there is any record, there is no one to be found who began to work well and to get into the good way, except in the times of Martin V" (1417) "and of Paul II" (1464). "Thenceforward it went on improving until Lorenzo the Magnificent" (1448—1492). Of Paul II, we know that he was a lover of gems and that he left a fine collection to his heirs, while Lorenzo, having inherited many valuable antiques from his father, Piero dei Medici, added to it the collection of Paul II and numerous other works, both of the ancients and of artists of his own time who flourished under his patronage. The inscription, LAVR.MED, was cut on many of these and serves to identify specimens owned by this connoisseur but now scattered through the World's great cabinets. The Accademia di S. Marco was founded by Lorenzo in 1488 to encourage the cultivation of all the fine arts.

Camillo di Leonardo, in his *Speculum Lapidum* published in 1502 and writing necessarily of the artists of the fifteenth century, the Quattro-Cento, speaks of their works as being "Diffused all over Italy and not to be distinguished from the antique." The latter judgment, of course, does not apply to the

knowledge of today. He mentions four cutters of intaglios as being pre-eminent: Giovanni Maria da Mantova at Rome, Francesco Nichini da Ferrara at Venice, Jacopo Tagliacarne at Genoa, and Leonardo da Milano at Milan. Mariette hazards a most interesting surmise that the last named was no other than Leonardo da Vinci, and many things seem to make the identification plausible. His wonderful versatility is known to have included work in gold and enamel, Milan had been his home after 1483, and Leonardo and Camillo were at one time respectively architect and physician to Cæsar Borgia. The strong argument contra is that there is no record in his works or in those of others of his proficiency in this art.

Also in the fifteenth century was the first gem-cutter recorded by name in Vasari: Giovanni delle Carniole who worked, as his sobriquet indicates, on carnelian and was under the patronage of Lorenzo dei Medici. "An infinite number" of his gems "both large and small" were extant in Vasari's time, the most famous of which, still in the Uffizi cabinet at Florence, is the deeply cut portrait of Savonarola on a carnelian two inches in diameter. Prospero delle Carniole, of whom little is known, seems to have been his contemporary. Of the same period was Domenico Campagni dei Camei who lived at Milan and whose name indicates, also, the nature of his work, but Vasari speaks of a wonderful intaglio portrait of Ludovico il Moro, on a large balas ruby, as being from his hand.

In the sixteenth century were Piero Maria da Pescia, the probable engraver of the gem of Michael Angelo referred to above (Pl. XXXI, 2), and Michelino, a worker in intaglio on carnelians, both employed by Leo X. Also Nicolo Avanzi of Verona followed his profession at Rome and did intaglios and cameos, his best recorded gem being a birth of Christ, with many other figures, on a two inch lapis lazuli. Mondella, another Veronese, found employment at the capital of Christendom.

That Benvenuto Cellini may have tried his hand at this art is based on his account of his engraving the Zodiac and heavenly bodies on a ball of crystal, and on a Bacchanalian

scene, signed Cellini, engraved on the lid of a lapis lazuli box once belonging to Cardinal Gonsalvi but now in England. Of course the latter may well bear a forged signature, but the contrary supposition is altogether credible.

At Bologna were Matteo dei Benedetti who died in 1532, Marco Attio Moretti, who was famous there as early as 1493, and Furnius di Bologna. Skill in the art is also attributed to the painter, Francia. Pomponius Gauricus ranks Furnius as equal to Pyrgotelēs and Dioskouridēs as he also does Foppa Caradosso of Milan. Severo da Ravenna he places highest of all.

In Germany there was Heinrich Engelhart of Nuremburg, a friend of Albrecht Dürer, who engraved coats of arms on gems.

Giovanni del Castel Bolognese was the earliest Renaissance gem-cutter whom we know of as signing his work: either IOANNE B—IO, CASTEL BON—IO or C. B. He was first under the patronage of Alfonso of Ferrara, then of Cardinal Ippolito dei Medici, and then of Cardinal Alessandro Farnese. His most accounted works were intaglios on large rock-crystals of such subjects as an assault on a castle, done for Alfonso of Ferrara, the four evangelists for Pope Clement VII, the wife of Darius before Alexander, the Rape of the Sabines for Cardinal Ippolito, Crucifixion and Passion pictures, scenes of contemporary battles and sieges, and many classical subjects, two of which, Tityos and the Fall of Phaëthōn, were executed for Cardinal Ippolito from designs by Michael Angelo: also he engraved portraits, especially one of Margaret of Parma. The characteristics of his intaglios are shallowness of the cutting, rather stiff drawing, elaborate finish, and high polish of the interiors, though the Tityos lacks this entirely.

Valerio dei Belli (Il Vicentino) was perhaps the most prolific gem-engraver of the period and ranked very high until his death in 1546. He was employed by Clement VII and Paul III. His drawing is rather more free than that of Giovanni del Castel Bolognese and his technical skill at least as high, but he had little originality and copied largely from the an-

tique. Portrait cameos and rock-crystal intaglios of sacred and classical subjects, together with numberless gems both large and small, heads, figures and historical scenes, bore witness to his industry and vogue. His signature, VALE or VA. VI. F, was always cut on his works (See Pl. XXXI, 12). His daughter, taught by him, also attained some distinction in the art.

Matteo del Nassaro of Verona learned gem-cutting at Rome from his fellow Veronese, Avanzi and Mondella. He, too, executed many of the fashionable intaglios on large rock-crystals, including a Venus and Cupid and a piece showing figures of all the planets. Of cameos, of which he did a great number, the most famous was a Deposition from the Cross on blood-stone, so managed that the red spots on the jasper represented the drops of blood. Later he went to Paris and enjoyed the patronage of Francis I for whom and his courtiers he worked unceasingly on ornamental cameos, notably a head of Dejanira in chalcedony. Other fine gems are attributed to him, especially a large cameo portrait of Diane de Poitiers. There seems to be no positive evidence that he signed, though Mariette reads the letters, O. P. N. S., found on certain gems in the French collection, "Opus Nassari sculptoris."

Marmita, the elder, of Parma, engraved many gems after the antique but Luigi Marmita, his son, in the service of Cardinal Salviati, at Rome, reached a much higher degree of excellence. His most famous work was a cameo head of Sokratēs.

Domenico di Polo flourished at Florence along 1536 and worked at intaglios for Alessandro and Cosimo dei Medici.

Luigi Anichini of Ferrara located at Venice and was noted for the precision of his small intaglios. King attributes to him certain microscopic battle-pieces and many figures done in cameo.

Leone Leoni of Arezzo worked for Charles V, notably in cameo.

Alessandro Cesati (Il Greco) is said by Vasari to have surpassed all the rest and engraved innumerable gems. He did, for Cardinal Farnese, an intaglio portrait of Henry II in

carnelian, an inch in diameter, which was especially praised by Vasari, a lion looking out of his den in intaglio on a burnt onyx, and many fine cameos, foremost among which is a head of Phōkiōn in the Florence Collection, signed, ΠΥΡΓΟΤΕΛΗΣ ΕΠΟΙΕΙ; the earliest example, I think, of the forgeries of ancient signatures, though the idea here was probably mere vain-gloriousness. His regular signature was ΑΛΕΞΑΝΔΡΟΣ ΕΠΟΙΕΙ, either in full or abbreviated, and King suspects that many gems signed "ΕΛΛΗΝ," a translation of his sobriquet, are by him (Pl. XXX, 13).

Giovanni Antonio dei Rossi, a Milanese, worked at Florence under Cosimo dei Medici, for whom he did a cameo in onyx, seven inches in diameter, with portraits of the duke, his wife, and his seven children. By him, also, is an intaglio on carnelian of a throned Saturn with a scythe. He signed, G. ROSSI. Agostino del Riccio mentions Georgio, Ambrogio, and Stefano as Milanese engravers of the time, as were Gasparo and Girolamo Misuroni and Jacopo da Trezzo. The last named was especially famous for his portraits, generally done in relief, among which was a head of Philip II, who had summoned him to Madrid. He is said to have discovered a mode of engraving on the diamond and to have executed a coat of arms of Philip in that stone. The testimony of several witnesses, however, awards the credit of the discovery to Clement Birago, another Milanese in the service of Philip, and the works cited are a portrait of Don Carlos and a seal bearing the Spanish arms. Jacobus Thronius, too, is said to have cut a coat of arms of Queen Mary of England on a diamond.

Tortorino Taverna of Milan was a good engraver of cameos and Giuliano Taverna, in rock-crystal (See Pl. XXX, 14).

Giovanni Giacomo Caraglio of Verona went to Poland, at the invitation of Sigismund I, where he is known to have lived as late as 1569, working in cameo and on rock-crystals.

Annibale Fontana, who died at Milan in 1587, was famed for both cameos and intaglios.

Philippo (Pippo Santo Croce) worked at Genoa and left descendants who followed his art.

Antonio Dordoni of Bussetto, in Parma, died at Rome in 1584 and is said to have done, among many other works, several intaglio temple façades in the Stosch Collection.

Flaminius Natalis, noted as an engraver of coats of arms, died at Rome in 1596.

Christopher Schwargen of Augsburg (?) died in 1600.

One of the latest known engravers of the sixteenth century was Alessandro Masagno, who went from Milan to the court of the Emperor Rudolph II, but the last of the Cinque-Cento school is Olivier Coldoré, who cut, in 1590, on a ruby, a remarkable and often copied head of Henry IV and worked at Paris, under the patronage of that king and of his son Louis XIII, well into the seventeenth century. No figures have been attributed to him but only heads, generally in intaglio. He seems to have signed at least some of his work with the letters C. D. F., which appear on several cameos and on an octagonal sapphire bearing an intaglio bust of Henry IV. It has been read "*Coldore fecit.*" His identity with one Julian de Fontenay, mentioned in letters patent of 1608 as the king's valet and engraver of precious stones, has been asserted.

With the opening of the seventeenth century, the Sei-Cento of the Italians, the impulse of the Renaissance toward gem-engraving seems to have exhausted itself and the work falls off in excellence, especially in Italy, where the Catholic revival substituted a line of severe ascetics for the half Pagan humanist popes who had gone before, and in France, then devastated by religious feuds.

In Austria and Bavaria, however, where the Renaissance started somewhat later, it maintained a pretty high standard until 1650. The tendency toward overdone action increased, and the classic repose fled still farther from their attainment. Many new stones were used, especially those offering new color combinations for cameos, and difficulty for difficulty's sake attracted them more and more. It seems that the desire for ancient gems was growing, and contemporary art began to find less encouragement, a development which continued and paved the way for the many forgeries which finally killed the vogue.

Sold for £700 with the Demidoff Collection in the nineteenth century is a curiously complicated cameo showing Mars and Venus caught in the snare of Vulcan and exhibited by him to all the shocked deities of Olympus, who are indicated by a circle of busts. The anvil and tongs of Vulcan, the dove of Venus, and the helmet and shield of Mars occupy corners of the stone, while the cock, who should have warned the lovers but failed in his duty, stands at Vulcan's feet. The inscription reads, D.CALABRESI.FECE.IN.ROMA. The artist has not been identified but the story is that, imprisoned for five years, he worked steadily on the gem and procured his release from Pope Gregory XIII by its presentation.

Among the artists maintained by Rudolph II, at Vienna, were Lehmann, who is better known for his discovery of the art of engraving on glass, and Miseron, who was rewarded by being made noble. His son, Deries, was in the service of the Emperor Matthias.

Raspe thinks that "ANNIBAL" is the signature of a gem-engraver who lived at Clausthal about 1650 and did medals for the princes of the houses of Brandenburg and Hanover.

Giulianelli writes that Ferdinand II, at Florence (1627), employed even more artists than did his father Cosimo II, and gives the names of Castrucci, Carrioni of Milan, Giaffiere, Monicca and Gasparini. He also speaks of Perriciuole at Sienna, Chiavenni and Vaghi at Modena, and a family named Siletti who lived at Ferrara, but no works of these men seem to be known.

Adoni, at Rome, did mostly cameos of clasped hands, known as "fedi" and used for betrothal rings.

Borgognone flourished at Florence about 1670 and cut many intaglios: death's-heads in ruby, a sun in rock-crystal for a watchcase, a true-lover's-knot, also in rock-crystal, a tiger recumbent with a thyrsos and broken dart, and, of course, heads. Stefano Mochi was his contemporary.

Under Louis XIII worked the Maurices, father and son.

Suzon Rey, a Frenchman, lived at Rome and did all sorts of subjects, noted among which were a head of Carlo Albani,

brother of Pope Clement XI, and a seal for the Marchese Castel San Vito.

Thomas Simon, who designed the coinage of Oliver Cromwell, is also believed to have engraved gems, on the strength of certain cameo portraits of Clarendon and the Protector.

Portraiture was the most successful work done all through this epoch. The later engravers also produced many heads of deities and philosophers, coarsely cut in stones of considerable size, together with unskilful copies of works of better periods.

In leaving the gems of the late Renaissance attention must be called to the great number of intaglios engraved in the roughest manner on lapis lazuli, many of the pictures being imitations of the antique. Often it is extremely difficult to distinguish these from bad work of the Lower Empire, since the roughness is of a similar character. Very careful examination is necessary to remove many gems of this type from the doubtful class.

CHAPTER XII

GEMS OF MODERN TIMES

WITH the eighteenth century came a new revival of gem-engraving, excellent in its technique but ever to be regretted in its tendencies. Whereas the artists of the Renaissance had, for the most part, striven in honest emulation of the ancients, yet naïvely following their own ideas and methods, the clever craftsmen of the eighteenth, the Century of the Dilettanti, were nothing more than conscious imitators, at the best, and rank forgers at the worst. For every ancient gem of note, many copies, more or less exact, were turned loose on the market. Beautiful antique pastes were eagerly sought, copied and then destroyed to guard against possible identifications, doublets of glass, moulds of gems pasted on stone, were fabricated and are difficult of detection when set in rings, old gems were retouched and even recut, and the names of real and imaginary artists of antiquity were interpolated on many stones to meet the current belief of the amateurs that the ancient artists habitually signed their work.

Gem-collecting now reached the stage of mania. Baron Stosch, a Hanoverian spy on the movements of the Pretender at Rome, formed a large cabinet of gems, genuine and forged, many, presumably, at his own instigation, the whole of which was bought by Frederick of Prussia for 30,000 ducats and now forms part of the Berlin collection. The Duc d'Orleans and the Dukes of Devonshire and Marlborough paid incredible sums for fine examples of the art. Lippert is authority for the statement that the latter paid Stosch £1000 for the cow of "Apollonides," a gem which has been seriously questioned and its signature utterly disproved. He also bought, from Sevin of Paris, for

the same price, the Diomēdēs with the Palladium of Felix. La Chaux tells that the Duke of Devonshire paid Zanetti of Venice £1200 for four gems, and Raspe, that he paid 300 guineas for a cameo portrait of Vespasian. So the figures run and it is easy to see how they must have inspired the forgers.

Catherine II of Russia plunged enthusiastically into the game and, as I have already said, even George III was inspired to establish a reputation for artistic taste by purchasing the collection of Consul Smith.

With the affected classicism of the Republic and First Empire, Heliogabalus himself was outdone, and alleged ancient gems decorated the persons of the exquisites, male and female, literally from head to foot. Josephine was among the foremost in the field and it cannot be denied her opportunities for plunder were excellent.

Still, the danger today is less than might be imagined from such wholesale and high priced fabrication. With all their skill and cleverness the forgers did not know the game. They cut intaglios in large numbers as well as cameos, but they lost sight of the fact that the ancient intaglios were almost invariably made for signet rings and they saw no reason against copying their subjects on stones much too large for that purpose. Knowledge and common sense with a careful application of the principles I have laid down in the Introduction should leave few of these efforts that will give very serious trouble now or, perhaps, to put it more conservatively, should leave a large proportion of them that will fall easily in my classes 4 and 5. Furtwängler writes of the signature forgeries, that those done down to 1750 were inadequate but that in the second half of the eighteenth century the antique method of writing was so well reproduced that it is often difficult and sometimes impossible to judge from the signature alone. Of the pictures he says, it is instructive to compare admitted copies by the best artists with the original stones and that you always find a marked difference. In poor work this difference would, naturally, be less clearly defined but fortunately the poor work was not the kind that tempted really clever fabricators.

Of the artists of this time Flavio Sirletti, who died at Rome in 1737, was, perhaps, the most famous. He used the diamond point in finishing his work, Gori states, at the suggestion of Baron Stosch. Especially prized were his portrait heads, whether of contemporaries, like that of the painter, Carlo Maratta, or of the ancients, like his copy of the bust of Caracalla. Also highly valued were his admirable intaglio copies of such ancient statues as the Farnese Hercules, the Giustiniani Mercury riding a ram, the Apollō, and the Laocoön. The last named, an amethyst, was bought by the Duke of Beaufort. The signature on his acknowledged works is either ΦΣ or ΦΛΑΒΙΟΥ, but he also inserted many spurious ancient signatures on old gems and it is alleged that the collections of Andreini, Stosch and the Jew, Medina, at Livorno, afterward bought by Lord Bessborough, "profitted" largely from his practices. His two sons, Francesco, who signed, ΦΡ (or ΦΡΑΓΚ) ΣΙΡΑΗΤΟΣ (Pl. XXXII, 13), and Raimondo, followed his profession at Rome.

Domenico Landi, at Rome, was accounted an artist of high merit. His best works were a bust portrait of Augustus in chalcedony and a portrait in emerald of N. Daodo, the Venetian envoy to Rome; also two large gems with four heads on each, on one, those of Trajan, Plotina, Marcianus and Matidia and on the other those of Severus, Julia, Caracalla and Geta.

Christian Reisen, a Dane by descent, lived in England and died in 1725, leaving many intaglios. A portrait of Charles XII of Sweden is his best known work.

Claus, his pupil, excelled him and died in 1739, and Smart, another pupil, was working in Paris in 1722 and was famous for his ability, according to Mariette, to do several fair portraits in a day. Seaton, a third, was at the head of the profession in London in 1750. He finished his gems elaborately but they are, according to King, cold, weak and spiritless.

M. Aschari in 1725 signs a fine bust of Diana on a pale topaz.

Anton Pichler, 1697—1779, settled at Naples in 1730 and was famous for imitating the antique. His usual subjects were

figures of Venus and Cupid. His signature, often found, is A. Π. Girolamo Rossi worked at Livorno about 1730.

Johann Christopher Dorsch of Nuremburg, 1676—1732, did much work in the style of the Renaissance and also a large number of poor imperial heads. Two daughters followed his profession, one of whom, Susanna, better known as Madame Preissler, was his superior both in cameos and intaglios. Her brother-in-law, the younger Preissler, also did good work.

F. J. Barrier, born at Paris in 1680, is known as an engraver of modern portraits and was employed by Louis XV.

Jacques Guay of Marseilles followed him in this employment and did a fine cameo bust of the King, also a good portrait of Crébillon and many heads from the antique which Mariette calls perfect imitations. His Victory of Fontenoy on a sard is very spirited and many of his gems are in the Bibliothèque National.

Becker, who died in 1743, was accounted the first of his profession in Germany. Born at Coblenz, he went to Vienna and thence to St. Petersburg, at the invitation of Peter the Great. His only known portraits on gems were of Charles VI and of Prince Eugene. Most of his work was coats of arms of various German princes. Several gems of this period are signed, Hecker, probably another artist, though King suggests it is merely a misspelling of the name.

F. Ghingi worked at Naples in 1750.

Waldev of Strasburg is little known except from the praise of his pupil, F. M. Fabii, a Venetian, who practised his art at Vienna and cut numerous cameos, including an Otho, a Pallas, and an Alexander in sardonyx. Among his intaglios were sards with heads of Julia, daughter of Titus, Pallas and Cybele.

Masini, also a Venetian, did excellent work at Florence, where, also, were located, L. M. Weber, A. Santini, Giovanni Cavini and A. Ricci (Briosco Crispo):—all these along the middle of the eighteenth century.

Francesco Borghigiani was born at Florence in 1727 but went to Rome in 1751, where he did cameo heads of Sokratēs, Tiberius and Faustina and an intaglio of Regulus. Thence he

moved to Livorno and cut many gems, notably a Roman Consul in plasma and a cameo head of Faustina. Returning to Florence in 1752, he attained high celebrity under the patronage of the painter, Ignatius Hughford, and did a copy of the Pitti Bacchante, a female head in jacinth, a Phōkiōn, a Judgment of Paris, a cameo head of Christ, a cameo skull and cross-bones and many other fine works.

Gottfried Graaft—an excellent name for the times—enjoyed considerable reputation at Rome about 1760.

After the death of Flavio Sirletti, Carlo Costanzi succeeded to his pre-eminence. He resided at Rome and did a Lēda, a head of Antinous on diamond for the King of Portugal and reproduced many antiques, including the Strozzi Medusa, signature and all, on a stone of the same kind, a chalcedony, that deceived the connoisseurs. Also he left many portraits of his contemporaries: a Maria Theresa in sapphire, a Cardinal Spinola on agate-onyx, a head of the Pretender and, on an emerald two inches across, a head of Pope Benedict XIV in relief with those of St. Peter and St. Paul on the reverse. There is also a Cosimo III bearing his signature: CAV. CAR. COSTANZI.

His brother, Giovanni Costanzi, worked with him and was best known for a head of Nero engraved on a diamond.

Jean Lorenz Natter of Biberach, 1705—1762, excelled his predecessors in imitations of the antique, though his copies always show a difference. At the beginning of his career he engraved coats of arms at Venice; then, going to Florence, he came under the influence of Baron Stosch and supplied him with many of his “ancient” masterpieces. Later, at Rome, he worked with much success, producing, notably, a reduced copy of the Julia, daughter of Titus, by Evodos and a portrait of Cardinal Albani. Thence he went to London where he published in 1755 a book on antique gem-engraving. Several of his signed works reached the Marlborough Cabinet, together with a number of unsigned imperial heads. From London he journeyed to Persia and thence to St. Petersburg. His earliest signature is L. N., his later, NATTER or its translation into Greek,

ΥΔΡΟΥ. Sometimes he signed with a rebus figure of a serpent. He insisted that he never sold any of his work as antique.

C. Brown, an English gem-engraver, worked along the middle of the century, both in London and Paris, and was noted for intaglio heads of Bacchantes, figures of Cupids and portraits. He also cut cameos. His signature was either C. B. or his name in full. W. Brown, his brother, was also a fair artist. The signature, "Brown," found, sometimes, on a gem, leaves it, usually, uncertain by which of the two it was done.

Wray of Salisbury, who died in 1770, engraved a few fine intaglios: The Dying Cleopatra, a copy of the Strozzi Medusa, a Magdalene, a Flora, two Miltons, one in full face and one in profile, a Cicero and several others. He signs both in English and with his name Hellenized into ΟΥΡΑΙΟΣ.

Louis Siries, a Frenchman, who lived at Florence, was one of the best gem-engravers of his time. His tendency was to essay impossibilities, often in the line of minuteness, and St. Laurent says he "Dreaded nothing so much as the being thought an imitator of the ancients." Microscopic cuttings on thin yellow sards set into frames of white agate have been left by him; also notable are a Crucifixion intaglio in lapis lazuli, a relief entitled "The Wonders of Nature, the Arts and Sciences," a cameo bust of Louis XV surrounded by the Zodiac, facing heads of Frances Stephen and Maria Theresa, Sol in his car in the Zodiac, Hercules and Antaios, with many others. King does not rank him very high and calls his heads weak and his landscapes mere scratches. He signed either L. S. or his name in full.

Johann Pichler, the son of Anton, 1734—1791, excelled his father in his art and seems to have been the leading engraver of his time. He was born at Naples and most of his works are intaglios which were often sold by dealers as antiques. To prevent this he is said to have always added his signature, ΠΙΧΛΕΡ (Pl. XXXII, 16). King says that Pichler told a friend that, although he had striven to imitate the antique, he did not consider his best efforts equal to their mediocre ones. Also he tells the story of a youth with a hoop which he engraved

on a brown sard and lost. Some weeks later Alfani, a noted antiquarian, brought him the gem which he had bought for fifty zecchins from Christiani, another connoisseur who had got it from a peasant who claimed to have dug it up in his garden. Alfani asked Pichler to make a copy for forty zecchins and then sold both at Paris for a hundred louis each. The two purchasers, chancing to meet and compare their gems, each claimed his to be an antique and the other's a modern copy, finally sending them to Pichler at Rome for his judgment, when the fraud came out. It appears the first gem had been stolen by a pupil who employed the peasant to pass it off on Christiani. The whole narrative is an excellent commentary on the ways of the times. Most of Pichler's intaglios are on large stones, well drawn, not very deeply cut and highly polished. Busts, notably one of Helen, and figures of Venus after the antique are among his best works. Köhler accuses him, with what justice it is hard to say, of having forged many Etruscan scarabs and of having forged artists' signatures on many ancient gems.

Passaglia, a lieutenant in the Papal guard, won very close to the antique, both in spirit and execution, though he is said to have always signed, ΠΑΖΑΛΙΑΣ, for the identification of his work.

Rega of Naples flourished at the end of the century, dying in 1812. He, too, caught the spirit and execution of the antique much better than had the others, and his subjects seem all to be classical ones. King says that his head of Pallas with a hippocamp finely cut on her helmet (Pl. XXXII, 18) and his Ajax in despair, with a recumbent bull by his side, might easily mislead a connoisseur but for the signature, ΠΕΓΑ, which he always used. I venture to differ with Dr. King.

Simon, who worked at Paris, was a great-grandson of Thomas Simon, Cromwell's engraver referred to above. Chabouillet speaks of his gems as "possessing considerable merit."

Giulianelli praises Aaron Woolf (L'Ebreo), who lived at Livorno and at Siena in 1752, and speaks of a Leda on a carnelian and the coat of arms of the King of Naples on a white sapphire.

La Chaux mentions Michel, a pupil of Guay's, as an artist of promise in 1784.

Jeuffroy, of Paris, was much admired by Raspe for his portrait of Mrs. Cosway, the actress, done about 1791.

In 1797 Millin names as gem-engravers most in repute at Rome, Santarilli, Masini and Capperoni. He also praises a Signora Talani, of Roman extraction.

Köhler has admired the finish and delicacy of certain portrait cameos of the Russian imperial family, the work of the Grand Duchess, Maria Feodorowna.

Amastini is said by Nagler to have copied antique gems at Rome during the latter part of the century and this signature appears on a cameo of Venus seizing Cupid by the arm, in the British Museum. King speaks of its "Berninesque flightiness."

R. A. Burch, who died in England in 1814, belonged to the eighteenth century school and cut excellent cameos and intaglios. A St. George and the Dragon on sardonyx evidences his skill in the former, and heads of Hercules and Ganymêdê are the best known of his intaglios.

His pupil, Marchant, 1755—1812, far surpassed him and was the best of all the English gem-engravers (Pl. XXXII, 17). He followed the antique style with neat elegance but in a somewhat stiff, academic spirit. At Rome for sixteen years, he cut modern portraits, antique heads, figures and groups, all intaglios, it is believed, and signed, MARCHANT . ROMÆ. The Prince Regent and the Duke of Marlborough were both his patrons, and his masterpiece, Hercules restoring Alkêstis to Admêtos, was done on commission from the Elector of Saxony and given by him to the Duke of Marlborough. He received £200 for a group of two women, apparently portraits, on a brown sard.

Other names of British artists of this period are Band, W. Barnett, Bemfleet, Berry, Bragg, E. B. F. Burch, Crane, Joseph Cave, Deane, who left only three angels' heads, Fraser, Frewin, Grew, Harris, Hill, J. Hills, Holland, Kirk, Lane, Law, Logan, J. Milton, Nossop, Peart, Pingo, W. Pownall, T. Pown-

all, J. Smith, T. Smith, Thompson, Vere, Warner, Whitley, Wickstead, Williams, Wise and Yeo.

What the seventeenth century had been to the sixteenth, the nineteenth was to the eighteenth. The traditions continued and, down to 1840 or thereabouts, the imitations of the antique were turned out in great numbers, becoming at once more refined and more affected. It was now that they began to indulge in various tricks to give the modern stone an antique look. Connoisseurship, though still ignorant, was becoming more suspicious in some directions, since the mass of forgeries had at last forced recognition.

The discoveries in Etruria in the thirties spurred the forgers to efforts in that direction, as I have said above, but it is not believed that the best workmen gave much attention to this branch and the imitated scarabs were generally rough and unsuccessful.

Luigi Pichler, a younger son of Anton, was one of the most prominent gem-engravers and worked at both Vienna and Rome, along the lines of his brother, Johann. He carried technique to a high level and polished his engravings most elaborately (Pl. XXXII, 11, 22). His acknowledged works are signed, Λ.ΠΙΧΛΕΡ.

In Brussels several members of the Simon family continued to thrive.

Perhaps the best and the most spectacularly known of the fraternity was Benedetto Pistrucci, born at Rome in 1784 but who lived and worked in London for forty years and attained a wonderful measure of pecuniary success. Dr. Billing gives the following prices paid for some of his reliefs: a St. George and the Dragon in jasper, afterward adopted, with slight variations, as the design on the sovereigns of George IV, 100 guineas; a full face Medousa head in jasper, 200 guineas; a lion, bound with garlands by Venus and Cupid ("Force subdued by Love"), 200 guineas; Youthful Bacchus, 300 guineas; St. Andrew, 350 guineas, and Minerva 500 guineas. He even received £800 for a cameo showing heads of Augustus and Livia which, by the way, brought £30 at the sale of the Herz Collection in

1859. His especial genius was evidenced in relief work on stones of one color, of which his Trajan head in sapphirine chalcedony is a fine example. King knows of no signed intaglio from his hand.

Pistrucci tells in his autobiography, which brings his life down to 1817, how, having repeatedly found cameos of his, which had been roughened and steeped to give them a patina, in the hands of Roman dealers as veritable antiques, he made a practice of placing his private mark, a Greek Λ , in some concealed place in the hair or drapery of his heads and figures.

The story of the "Flora," now in the British Museum, is worth repeating here, both as evidence of the general situation and because it was, doubtless, one of the incidents that paved the way for the collapse which the Poniatowski gems precipitated. Briefly, the facts are that when Pistrucci was at work at the house of Sir Joseph Banks, on a model for a portrait head, Mr. Richard Payne Knight, one of the best known antiquaries and collectors of the time, called and showed them triumphantly a small head in cameo which he held to be a veritable antique and for which he had just paid £500 to the dealer, Bonelli. The gem was broken off from the back of the head down to the throat and the lower part was lacking. Pistrucci at once announced that, six years before, he himself had executed the cameo as a Flora on a stone of peculiar shape which he had managed so that it seemed to have been broken, and that he had got £5 from Bonelli for it. He further said that they would find his private mark hidden in the hair at the top of the head, unless Bonelli had erased it. How far Payne Knight yielded at the time we have only Pistrucci's word for and he claims that he did yield, after an angry dispute. It is certain that the connoisseur was touched at his most sensitive point. He soon succeeded, however, with the aid of Bonelli, in reassuring himself and to the time of his death refused to accept the gem as other than antique, cataloging it, finally, as a Proserpina crowned with flowers and maintaining Pistrucci's claim to be an impudent attempt to prove an unmerited pre-eminence for himself. Experts took sides

and the controversy waxed hot, with the inevitable result of unsettling the opinions of many as to the infallibility of the judgments they had relied on. Considering the "Flora" now and in the light of present knowledge, it is hard to see how it could ever have been an object of dispute among cognoscenti. Whether Pistrucci did it or not, it is quite apparent that it is no work of antiquity.

Prominent among the artists and forgers of the early part of the nineteenth century were Cerbara and Girometti at Rome, the former of whom was famous for his intaglios and the latter for cameos, notably his Hēbē presenting nectar to Jove, done on an oriental onyx.

Calandrelli worked at Berlin and some of his gems found their way into the great Prussian collection there (Pl. XXXII, 19), the brothers Tipa forged merrily at Trapani in Sicily, but most famous, perhaps, of the Italians were the precious quartette, Ginganelli, Dies, Odelli and Tomaso Cades (Pl. XXXII, 20), noted mainly as the principal perpetrators of the Poniatowski gems. These it was who killed the goose that had laid so many golden eggs, though it can hardly be doubted that the bird had so conducted itself that its demise could not have been very long delayed.

Prince Poniatowski's part in this remarkable performance has never been satisfactorily explained. He had inherited from his uncle, Stanislaus, the last king of Poland, a collection of one hundred and fifty-four gems, most of them of undoubted antiquity and including many of the most important examples, like the female head by Dioskouridēs, then held to be an Io. To these he added nearly three thousand more which were made at his order by the Roman gem-cutters, the subjects being their own or the Prince's conceptions of pictures from classic history and mythology, done on oriental sards, amethysts and crystals of fine quality and, for the most part, considerable size. There is absolutely no suggestion of antiquity in the melodramatic flamboyancy of these compositions (Pl. XXXII, 21), many of them involving a number of figures, and the supposition that the Prince was himself deceived by the artists is inconceivable.

The fact that he never tried to sell any of the gems would seem to negative the supposition that he himself sought to profit by the fraud, and the motive which King advances that, being deeply interested in the glyptic art, he wished to encourage its professors and to prove them competent to rival the ancients seems to me to be hardly tenable in the face of the fact that to Odelli was assigned the province of providing every gem with the forged signature of some real or imaginary artist of antiquity. Altogether the whole performance carries us beyond the realm of any reasonable line of explanation and one is driven to take refuge in a suspicion that Prince Poniatowski had simply become an unbalanced monomaniac on the subject. He died at Florence in 1833, and the collection was sold in London in 1839, when such was the effect of the scandal that even the wonderful "Io," discredited by the bad company into which she had fallen, was knocked down for £17. A few years before £1000 would have been a low price for her.

To show the condition that resulted, some hundred and fifty of the Poniatowski gems that were put up in London in 1854 could not get bids of over 25s to 30s, in spite of which—and this is, perhaps, the most remarkable feature of the whole affair—certain persons, in 1858, issued an elaborate work maintaining in all seriousness the antiquity of these discredited forgeries and the genuineness of their utterly absurd attributions. They are now scattered all over Europe and, several years ago, about a hundred of them were presented by the late Mr. E. McK. Holly, together with a large collection of other gems, to the New York Charity Organization Society to be disposed of for its benefit. These were placed on sale at Tiffany and Co.'s at prices ranging from \$90 to \$150. Probably some were sold but many still remain at the Organization rooms in New York City and whoever desires a Poniatowski gem can secure one there. As pretty work, characteristic of their period, they have a certain value; as monuments in the history of forgery they have another, but the combination is not over-attractive.

Enough has been said to point out the causes which led

to the general loss of interest in engraved gems as subjects of connoisseurship and objects of the collector's desire. The effect on the prices obtainable for them was equally inevitable. From sums that ranged to \$5000 and more, the sale of the "Io" of Dioskouridēs for £17, of Pistrucci's cameo of Augustus and Livia, for which he received £800, for £30 and of numberless ordinary specimens for next to nothing tell the story. Thus, with the uncertainty as to and loss of interest in the antique, the taste for and values of contemporary work suffered a like collapse. Clever craftsmen could no longer get any but the most paltry prices for either their forgeries or their acknowledged art, and hence there soon ceased to be either clever forgers or artists.

A few pretty good workmen struggled on after 1850: the two daughters of Pistrucci, Elena and Elisa, at Rome, Bassi at Florence, Paul Lebas and Luigi Isler at Paris, Brett and, later, Renton in England. Soon, however, even such excellence as was theirs faded and, today, in Europe and America little is done that is above contempt. The more important jewelers usually have someone in their employ or at hand who can cut a respectable coat of arms for a seal, which is about all the demand calls for. An exception is Ottavio Negri, formerly of Rome, but now located in New York, who is capable of excellent work (Pl. XXXII, 9), where the demand for it greater. His classical heads, some done on moon-stones, are charming and I have seen a plaque of his in rock-crystal of swans, in which the reflection of the birds in the water is very cleverly effected by means of shallow intaglios of them on the back of the stone. Such ancient subjects as he does are not in the nature of forgeries.

In Paris, too, there have been of late several gem-engravers whose work is well spoken of, though I am not personally familiar with it: Lefevre, recently deceased, and Lechevelle who is still living; and it is possible that, at the other European centres, there may be workmen of more or less ability whose names are, owing to the meagre demand, known only to small circles.

In the East it seems to be rather different. Though the signets of the Turks are usually cut in metal, the wealthy still use a ring-stone, and the skill necessary to cut the graceful lines of their script (Pl. XXXII, 1) is available for disreputable purposes (Pl. XXXII, 8). Count Michael Tyszkiewicz in his *Memories of an Old Collector* tells of a lot of ancient unengraved scarabs, mostly chalcedony, that were found in Cyprus and promptly bought by some dealers who had them engraved by a clever workman with a skill amply calculated to deceive even the reasonably wary and scattered them over Europe. Less successful attempts on modern scarabs were also put forth even in Tyszkiewicz's time and, with the new discoveries of Mycenæan and archaic Greek art, the awakened interest and the fair prices, it was quite natural to expect the revival of forgery in that line referred to by Furtwängler and to which I have already alluded.

I know of but one forger in Constantinople, a Greek, who is reputed to make occasional trips to Asia Minor where, in exchange for genuine finds, he distributes his work among the peasants who bury it to be dug up for the delectation of missionaries and tourists. Also there is a small factory at Panderma on the other side of the Bosphorus, and, at Tyre, a Syrian, Najib Saadi, has during the last three years made copies of a few ancient intaglios that must be scrutinized rather closely to fix their provenance, but the only establishment of any size in Northern Asia Minor is that of a Turk at Cæsarea. He has in his employ several Greeks and Armenians who turn out gems, cameos and coins which go, for the most part, to Smyrna for marketing.

In Italy, and, more especially at Rome, are still cut a large number of intaglios in stone. Most of these, while copies of antique designs, many of them on gems artificially colored in Germany, are evidently not intended to be sold as forgeries and those that are, whether Etruscan scarabs or imitations of Roman gems of the Empire, can deceive only the ignorant tourist for whose custom they are primarily intended. Dealers at Rome tell you the work is done at Naples and Neapolitan

dealers say, Rome, but I found no evidence of any manufacture to speak of at the former place. Enrico Girardet at Rome is probably about the best of the present day Italian gem-engravers and admits that examples of his work have been sold as antiques. That he made them as forgeries, however, he denies and I do not doubt his truthfulness. He does little now in the way of intaglios. Gaetano Trabacchi works, I believe entirely honestly, for Augusto Castellani, one of the most reputable of the Roman dealers in antiquities and facsimiles of ancient jewelry; Francesco Ciapponi cuts some cameos; Antonio and Virginio Lanzi (Pl. XXXII, 4, 5, 14?) and Mariano Macceroni (Pl. XXXII, 2, 3) still work at intaglios from ancient designs and in quite similar styles, copying, for the most part, the "pretty" subjects among the Cades series of casts. The first named, now an old man, has done some fairly good work in his day, at least in the matter of details. Each of these gem-engravers suggests one or more of his confrères as the source of the modern Roman fakes but the truth is not especially important. I was assured of the antiquity of a number of obvious forgeries at the shop of Giovanni Lanzi, a relative of Antonio and Virginio, and he recommended me to a certain shop on the Via Bonella, which I found well stocked with goods of the same kind. I have also seen many of these that were said to have been found at Ostia, the active excavations at which place having doubtless substituted it for the popular Pompeii provenance of fifty years ago as a pretended source. As for Ciapponi, his partner innocently tried to sell me as an antique a gem which the more honest engraver had told me a few minutes before was his own work. A glance, however, at the character of the output of these men is quite sufficient to guard one against the possibility of deception.

Incidentally, a word may be said here about the Cades casts, the models from which forgeries have long been done on the lines I have suggested. There are about six thousand five hundred of them, apart from the Egyptian scarabs and those catalogued as Cinque-Cento or modern, and it is interest-

ing to note that nearly two thousand of these are either pictures from the Erotic and Bacchic cycles or portrait heads.

With these remarks I may close the portion of this book which traces the history and phases of the development of gem-engraving in intaglio. It does not pretend to be either exhaustive or exclusive. Such a work would mean substituting at least a volume for each chapter. The attempt has been to give here a good general view of the tendencies and manifestations of each epoch in a systematic way and with enough typical examples to enable the student or connoisseur to place specimens accurately and detect the incongruities that spell hostility to the thought, spirit, technique or material of each period and art source.

PART II

THE DEITIES AND OTHER PERSONAGES COMMON OR
LIABLE TO BE FOUND ON ENGRAVED GEMS, WITH
THEIR APPEARANCE, ATTRIBUTES, ETC.

CHAPTER I
THE GREATER GODS AND THEIR ASSOCIATES
ZEUS—JUPITER

(Pl. XV, 15; XVI, 12; XXI, 16, 17; XXII, 9; XXIII, 11—13, 19; XXVIII, 21)

“THE Father of Gods and Men” was, naturally, one of the most common of the deities engraved on gems. He is most often represented after the Pheidian epoch as the enthroned Zeus of Olympia with the lower part of his body draped and his head crowned with a wreath of olive. The standing Zeus, either nude or with only a mantle over his arm or shoulders, is also frequent. His body is powerful but not over-muscular, and his hair, in later art, when treated specifically, is generally piled up on his head. The face, full-bearded, save rarely in early Greek or Italian art, is serene and full of kindly dignity, but these finer points are, of course, only noticeable on gems of finished excellence. Rarely he is shown, either on foot or in a chariot, contending with Earth-giants.

Primarily a sky-god, his usual attributes are the eagle and the thunderbolt, or, as ruler of Olympos, he holds a sceptre, and, as the victorious Zeus Nikēphoros, a figure of Victory. The patera or sacrificial dish is also a not uncommon attribute. As Zeus Orkios, the avenger of broken oaths, his aspect is terrible and he hurls a thunderbolt, sometimes holding one in each hand. Rarely he is shown in other arts as a child with the she-goat Amaltheia or with the Kourētes around him. I know of no such representation on a gem, but it is a possibility to be looked for.

He is often pictured under his metamorphoses: as the bull with Eurōpē, the swan with Lēda, the satyr with Antiopē and the eagle with Ganymēdēs (Pl. IV, 8; X, 6; XIX, 13?; XXVI, 17).

Many variant cults of Zeus existed from early times in different cities of the Hellenic world. Gems of these periods

are very rare, and at the periods when the great mass of our examples must be dated, the unifying sway of the Roman world-power had pretty thoroughly conventionalized the two types first described. A few words, however, about such of the local cults as suggest special features might guide some fortunate student in the interpretation of an early gem otherwise a puzzle, especially if he were lucky enough to be able to fix its provenance.

Zeus Endendros (living in the tree) was worshipped at Dōdōna. In statues of the Dōdōnan Zeus the Olympian olive wreath is replaced by one of oak leaves.

Zeus Lykeios was worshipped in Arkadia, and there is evidence that, at an early time, children were offered up to him. The cult there seems to have involved something of the wolf-transformation superstitions that have survived in parts of Europe almost if not quite to the present time. It would be very interesting and pertinent to find the god figured with a wolf on an early Greek gem.

Zeus Apomyios (avertor of flies) had his seat in Ēlis.

Several of the cult titles seem to indicate an early infringement upon what, later, became the province of Poseidōn. Zeus Apobatēros (protector of landings), Zeus Ourios or Euēnemos (of fair winds) and Zeus Enalios (of the sea) were undoubtedly sailors' gods, while in Karia there was the cult of a Zēno-Poseidōn, a composite deity.

At certain points, too, there was more or less early confusion of his personality or combination of his worship with those of both Apollō and Dionysos.

Though generally and, at last, exclusively a sky-god, there is no doubt as to his early worship at Athens as Zeus Gēorgos (the ground tiller), a god of crops, and in Phrygia as Zeus Karpodōtēs (giver of fruit). Thence, and by a natural gradation, we find at Korinth the worship of Zeus Chthonios (of the Under-world)—a far cry from the god of the eagle. Wheat-ears, fruits, and even the Chthonian serpent may some day be found with a representation of one of these local types.

Under many titles and in many places Zeus appears as a

god of the family, protector of paternal rights and of hospitality, a god of the State, of its assemblies, its armies or its colonies, but it is not probable that any of these would present novel attributes, unless the ox eating wheat or barley on the altar of Zeus Polios before being sacrificed might furnish a theme or the Zeus Chrysaor (of the golden sword), found on the Asiatic mainland in such semi-Hellenic regions as Karia and Bithynia. More promising are the wealth-giving types which seem to infringe upon the province of Ploutō: Zeus Ktēseōs (giver of wealth) at Athens, Zeus Plousios (the wealthy) at Sparta, and Zeus Olbios (blessed in worldly goods) in Cilicia.

It was, however, the worship of the Olympian Zeus that spread from Olympia, Athens, Sparta, Korinth, Megara, Chalkis, Milētos and Syracuse, over all the Hellenic and, finally, on his identification with the Roman Jupiter, over all the Roman World. Only the standing type, perhaps suggesting Jupiter Stator (the stayer of flight), contended with it in popularity.

At Anxur was a cult of the Beardless Jupiter—the boy god, son of Saturn.

Here, also, it is well to consider two developments of Jupiter. The most important of these was his later identification with the Ptolemaic-Alexandrian Serapis, god of the dead and of the Under-world. This movement, rather an absorption by an occidentalized Serapis of Jupiter, Ploutō, Hēlios, Æsculapius and other deities, was of a piece with the wholesale Hadrianic importation of Egyptian deities into the Roman religion by which what was already a tendency became a religious fad. Representations of Jupiter Serapis are very common and date, for the most part, from Hadrian's time or later. They are distinguished by the attribute of the modius or corn-measure on his head, a symbol of the lower world where the seed dies and whence it springs forth to new life. Not infrequently, too, the head is crowned with rays. The figure of a foot, sacred to the Alexandrian cult of Serapis and rather rarely found on Roman gems, may be placed as an attribute symbolizing Jupiter Serapis.

Much rarer, because it never became an imperially favored fashion, is the Jupiter Ammon type. In Greece, from ancient times, a connection existed between the Zeus of Dōdōna and the Ammon of Upper Egypt, and they were held to be the same god. In Hellenistic and Roman art Jupiter Ammon is to be distinguished by the ram's horn sprouting from his head.

The Baal of Dolichē, with his bull and double ax, was worshipped by the Imperial armies as Jupiter Dolichenus.

HĒRA—JUNO

Representations of Hēra or Juno are comparatively rare on gems. In very early times she was worshipped as an Earth-goddess, especially through Peloponnesos, and her place as the wife of Zeus seems to have been though an early yet somewhat a later development in the sense of its general acceptance. In Argos and Euboia was the cult of Hēra Zeuxidia (of the yoking), and wheat-ears were called the flowers of Hēra. Also there was the cult of Hēra Anthēia (of flowers). The pre-Dorian Hēra Telchinia (working in metals) at Rhodes was a distinct and probably non-Hellenic cult.

With her final placing in the Greek theogeny we find her pre-eminently a goddess of women, protectress of both maidenhood and marriage and giver of issue, doubtless as a development from her presidency over the fruitfulness of the soil.

Her type statue of later times, the work of Polycleitos, was at Argos and represented her robed and enthroned, crowned with the stephanos or forehead diadem and holding a pomegranate and a sceptre tipped with a cuckoo as the harbinger of spring. Besides these her attributes were the veiled head, as a marriage divinity, the goose of Juno Regina of the Capitol, the goat of Juno Caprotina, also an early Roman cult, the crow of Juno Sospita of Lanuvium, and the flower in the hand of Juno Lucina of the Roman Matronalia. Like most gods and goddesses she often holds a sacrificial patera. The sceptre is not found as an attribute prior to the fifth century and the peacock, perhaps the most common of all, was much

later and would never be found on a genuine scarab or scaraboid. She is always pictured fully draped. In mythology her attendants were Iris, goddess of the rainbow, and the Horai or Seasons, the latter as on an Earth-goddess, as may also be the significance of the rare attendance of a seirēn as a sepulchral figure.

From these it follows that representations of Hēra are not always the easiest to identify, especially on cheap work. Most of her attributes are common to many other goddesses, like the sceptre and stephanos, while Aphroditē, Dēmētēr and Persephonē all have the pomegranate.

In very few of her cults was she regarded a war-goddess, though the Hēra Prodrōma (running forward) of Sikyōn and the Hēra Areia (Marslike) of Pæstum seem to have been of that character, as were also the Juno Curites of the Sabines, with her spear, and the Juno Sospita (the savior) of Lanuvium, where her statue represented her with a goatskin over her matron's robe and a shield and brandished spear.

After the Third Punic War the ancient tutelary goddess of Carthage, Astarte, was brought to Rome, where she was revered under the name of Juno Cœlestis, and when, under the Empire, Carthage became once more a city, the cult was very flourishing. She is represented on a late gem riding on a lion. Juno Moneta (the admonisher) of the Capitol in whose temple money, thence named, was coined had as attribute a balance.

POSEIDŌN—NEPTUNE

(PL XIX, 16; XXIII, 20; XXIV, 5, 22)

Poseidōn was especially a deity of the Ionian race and appears quite frequently on gems. His figure as shown is not unlike that of Zeus, with the face almost always bearded. The representations with tumbled beard and hair are not found until after Pheidias' time, and his statue type, holding the trident and a dolphin, and with one foot on a rock or a ship's prow, is probably derived from a statue at Korinth, the work

of Lysippos. Occasionally draped in earlier times, he is often then and always later shown nude or with merely a scarf over his arm or shoulder.

At first he was undoubtedly a fresh-water god and, hence, a patron of vegetation, but when men essayed to conquer the sea his province was transferred and he became the patron deity of mariners and fishermen.

The bull and horse were sacred to him and he is often pictured borne over the sea in a chariot drawn by horses or hippocamps, half horse, half fish. Occasionally his wife, Amphitritē, is shown with him or the fountain-nymph, Amymōnē.

Besides the usual attributes of the dolphin and trident, there is also the tunny-fish and, rarely, the pine wreath. Very rare symbols but dating from the earliest times are a bough, a bunch of grapes, a ploughshare, and even a thunderbolt, but I have never seen a gem bearing any of these.

TRITŌNS

(Pl. V, 18; IX, 5; XIII, 6?; XXII, 10; XXIV, 22; XXVI, 3)

These were later emanations of Tritōn, son of Poseidōn and Amphitritē, whose home was Lake Tritōnis in Libya. They are shown with men's bodies and fishes' tails. In still later art they occasionally have horses' forefeet, as being half tritōn, half hippocamp. Their usual attribute is some form of conch shell which they blow as a trumpet or hold. They also sometimes carry tridents.

HADĒS—PLOUTŌ—ORCUS—DIS

(Pl. VII, 16)

This is one of the rarest figures found on gems, partly, no doubt, on account of his gloomy associations, though the Greek Ploutō and the Roman Dis as gods of wealth might have been supposed at least to soften the idea. Still, this province of the god was only derived from his Chthonian sway, and a

deity inexorable, inaccessible to prayers and sacrifices was not one whose influence was likely to be invoked on signets.

He is shown sometimes enthroned and always draped, and the three-headed dog, Kerberos, is his attendant. Occasionally his wife, Persephonē, is pictured with him, and on one gem he is seizing her in the meadows of Enna to bear her away. His hair generally hangs low on his forehead.

The vase painters have tried to picture him under the milder aspect of a beneficent Earth-god, with kalathos, fruit, a cornucopia or a two-pronged pick-axe, but vases had not behind them the talismanic idea. I know of no gem which shows the eagle, sometimes found on his sceptre in sculpture and which seems to suggest that he was originally evolved from Zeus. Another attribute is the key. The cypress and the narcissus were his sacred tree and flower, and in the rare sacrifices offered him on exceptional occasions black sheep were used.

With the Etruscans, who seem to have had a taste for horrors, his figure may have been pictured for the mere horror's sake. They sometimes showed him with a dog or wolf muzzle head-dress and a spear entwined with serpents.

With the introduction of the Serapis worship in Rome and its wide-spreading absorptions of native divinities, Hadēs, as might be expected, was one of those most readily assimilated. Thence we find the former assuming many of the latter's attributes as a sort of Hadēs-Serapis. No foreign infusion, however, could avail to make him a popular god.

DEMETER—CERES

(Pl. XXIII, 2)

Demeter, the Earth-mother, the Corn-mother, is a not especially uncommon figure on gems, especially in her later conventionalized forms. Matronly, enthroned or standing, fully draped and hooded or with her head crowned with wheat-ears and leaves or, sometimes, with a stephanos, she holds in her hands wheat-ears, a cornucopia, torches (wherewith she

sought Persephonē, her ravished daughter), poppies or a kalathos (fruit basket). The pomegranate is also one of her attributes and she may, perhaps, be found holding the mystic casket containing the arcana sacra of the lower world. Cattle and swine were sacrificed to her, and the latter, together with the serpent, were natural attributes of a goddess so distinctly Chthonian,—in a greater degree, even, than were all the corn-gods of the early cults. The ant, too, was her sacred insect.

A very ancient cult of Dēmētēr had its seat in Arkadia. There the goddess was worshipped in the guise of a figure with a horse's head, surrounded by serpents and holding a dove in one hand and a dolphin in the other. This, probably, either grew out of or gave rise to the legend of the steed, Areiōn, which sprang from Poseidōn's intercourse with her under the form of a mare.

Sometimes she is pictured with Persephonē or with Triptolemos, their agent, and in view of this it may be well to consider these divinities here.

PERSEPHONE—KORĒ—PROSERPINA

(Pl. VII, 16)

Originally a dualization of Dēmētēr, the corn-maiden who rises from the ground with the grain, the goddess of young vegetation in even early theogonies, Proserpina was considered her daughter and the wife of Ploutō who ravished her away while gathering flowers in the meadows of Enna in central Sicily. Rare on gems, she usually is found either with her mother, to whom she may be pouring a libation, or enthroned with or being carried off by Ploutō. In the former of these last two pictures she naturally wears the stephanos and holds a sceptre. Always robed, her attributes are the pomegranate, key, mystic casket, cornucopia, ears of wheat, torch, cup, and cock. When figured alone, as a beautiful maiden, she is not always easy to identify. A pig standing on a bundle of myrtle twigs has been supposed to symbolize her Chthonian power.

TRIPTOLEMOS—DĒMOPHOŌN—BONUS EVENTUS

(Pl. XXIV, 20, 21)

Triptolemos, the favorite of Dēmētēr, the Bonus Eventus of the Romans, is a rather common gem subject, especially throughout the times of the Empire, in his last named personification of good fortune. Earlier pictures show him as a man, bearded or smooth-faced, undraped or with only a mantle, invoking the half figure of a girl (Persephonē) that is springing up from the ground together with stalks of grain. He is also represented in Greek art in a winged chariot or in one drawn by serpents, though I have never seen a gem with this picture. On Roman gems Bonus Eventus is shown as a naked youth or, rarely, with a mantle, unbearded and, usually, with a patera in one hand and wheat-ear in the other. Sometimes he holds a poppy or a cornucopia.

HESTIA—VESTA

I know of but a single authenticated gem representation of this goddess so important as the guardian of the hearth both in Greece and Rome. Possibly the difficulty of identification may be responsible, in some measure, for this lack, for there is nothing especially distinctive about her figure or her attributes. Statues represent her standing or enthroned, matronly in form, pose, and costume, despite her virginity. Her head is always covered with a hood or veil and her attributes are the sceptre, torch, patera and Palladium. In the gem in the Berlin Museum she is shown with an ass on each side.

APOLLŌ

(Pl. IV, 24; V, 15p; X, 15c; XIV, 5, 8; XX, 3; XXI, 14;
XXII, 4; XXIII, 3, 4; XXIV, 13)

Representations of Apollō, the most brilliant creation of Greek religious thought, while rather rare on later and poorer gems, were naturally a favorite subject of the best periods and the best artists.

In a few early cults, as at Amyklai, he was bearded, but early in the sixth century B. C. the beardless Apollō had become the recognized type. At the beginning of the third century B. C. the effeminate representations of him came into vogue. More commonly he is nude or with only a cloak or scarf but the Apollō Kitharaidos always wears a long flowing robe, and many other pictures of him with a lyre and with the lower part of his body draped are evidently inspired by some recognized statue type.

His attributes are many, most conventionally the lyre, bow and arrow, tripod, and laurel branch; less commonly the palm and, rarely in varying degrees, the dolphin, swan, hawk, crow, raven, snake, wolf and wild goat, the mouse, as figured beneath the foot of the Sminthian Apollō of Skōpas, and the deer (a not very rare Etruscan attribute) which appears with him in the statue by Kanachos. The column, too, seems to have some closer relation to him than as a mere statuesque accessory, perhaps because his earliest monuments were mere conical pillars, though many primitive deities were symbolized in like manner. The griffin, emblem of the Hyperborean Apollō, is common in the later representations.

Throughout all the early cults, many of which held their ground down to a late period and any of which might readily influence a gem picture, we find a remarkable variety of powers appropriated to him. Like most of the older gods he was probably originally a deity of vegetation, trees, flowers, and harvests, thence a pastoral god who had care of flocks and herds and a god of the chase who, at the same time, hunted the rapacious and cherished generally the milder of the wild creatures.

As a wolf-god he was pictured at Tarsos standing on an omphalos, grasping the paws of two wolves arranged heraldically, and his power over vegetation was evidenced by the rite in the Karneia, at Sparta, where youths bearing grape clusters pursued a man decked with garlands; also at the Daphnēphoria, in Bœōtia, where a youth carried an olive log wreathed with garlands and flowers with a ball on top from which other balls were suspended.

The marble omphalos or boss at Delphi, supposed to be the center of the World, may be represented occasionally.

On the coins of Tarentum he holds a flower.

At Chalkēdōn he was pictured riding on a swan, and several Etruscan scarabs bear the same device or show the god as a charioteer driving a yoke of swans.

At Dēlos and at Olbia in Bithynia he has the kalathos and at Sidē he holds a pomegranate.

He did not generally figure as a war-god, but at Megara his statue held a spear, and Spartan coins show him with helmet, spear, and bow, the figure ending sometimes in a column, and with a goat and a laurel wreath in the field.

Much more common are evidences of his sea domain, probably a resultant of increasing Greek colonization, whence as "Founder of the Colony" and "Builder of the Home" this phase of "The Dolphin-God" was a natural emanation. A suggestion of this may also be found in his oracle at Syros, where responses were given according to the movements of certain fishes in a pool or to the eagerness with which they eat of the sacrifice. More definitely the dolphin on the coins of Delphi and Olbia, the tunny fish on those of Kyzikos, and the trident on those of Alexandria signalize his sea power. Coins of Antigonos Gonatas show him seated on a ship's prow.

At Teōs there was a curious cult statue of the Four-handed Apollō, a unique representation, as is the figure of Victory which he holds at Patrai.

His especial office in many places was that of legislator or law-giver, slaves bought their freedom through him, and, with Hēraklēs and Hermēs, he presided over athletic games (Note Apollō Lukeios at Athens).

As a god of healing and an averter of pestilences his worship was widespread in early times. Later, he seems to have abdicated this function in favor of his son, Asklēpios.

Perhaps the story of the slaying of the dragon, Pythōn, refers to this phase of Apollō, when the dragon would typify a demon of pestilence. Perhaps it symbolizes the Sun-god slaying the mists of winter. A few early gems which show Apollō

slaying a polypus may have reference to his sea power mentioned above and, at the same time, be the basis of the Pythōn saga.

Above all he presided over the fine arts: music, song, dance, and the intellectual side of life. The Muses and the Graces were his attendants. It is rather surprising that no late monuments show him with a scroll.

I have reserved to the last his best-known province: that of the Sun-god. All deities of vegetation had either Under-world or solar relation and there is little or no evidence of the former in Apollō. On the other hand, possibly his powers as a Sun-god and still more probably his widely recognized province as a god of divination led to his identification in later times, after Euripidēs, to be exact, with Hēlios, the early Greek personification of the all-seeing orb of day. It probably had its origin among the Asiatic Greeks, since the griffin was a solar emblem in the East.

HĒLIOS

(Pl. XVI, 7; XXVII, 14; XXIX, 17)

The Sun-god of early Greek mythology, later identified with Apollō and still later with the Persian Mithras, is a rather common figure on Roman gems, especially those of the Middle and Lower Empire when both his Mithraic association and the favor in which the sports of the circus were held ministered to his popularity. He is represented as a youth whose waving locks are crowned with rays, sometimes as a bust, sometimes a standing figure but more often as a charioteer driving his team. The crown of rays and the whip are his attributes.

THE MUSES

(Pl. XVIII, 5; XXI, 1; XXVII, 16)

Especially associated with Apollō and, to some extent, also, with Dionysos, they were originally nymphs of inspiring springs. At first but three in number: Meletē (Meditation),

Mnēmē (Remembrance) and Aoidē (Song), they were later amplified to nine. Kalliopē, muse of epic poetry, bears a tablet and stylus, sometimes a roll; Kleiō, of history, an open scroll or several in a box; Euterpē, of lyric poetry, a flute; Melpomenē, of tragedy, a tragic mask, a club or a sword; Terpsichorē, of choral dance, a lyre and plectrum; Eratō, of erotic poetry, also a lyre; Polymnia, patroness of the higher hymns, is usually shown veiled, pensive and meditating; Urania, of astronomy, has a globe; Thalia, of comedy and idyllic poetry, a comic mask, a pedum and ivy wreath. They all wear long garments and sometimes, also, a cloak. It should be added that the especial attributes given above were assigned in comparatively later times.

ARTEMIS—DIANA

(Pl. I, 5?; II, 12?; IV, 6?; VII, 12; XIV, 4; XIX, 2; XXIII, 7, 26, 27; XXIV, 18; XXVIII, 19)

Unlike the worship of her brother, Apollō, that of Artemis, even in the most civilized periods of Greek culture, retained more of savagery than did the cults of any other of the greater deities. That she was primarily an Earth-goddess is certain, but of the wilds rather than of the harvest fields. First a protectress of animals, later, a huntress goddess, with the exception of the goat in late times, only wild creatures were sacred to her: the hare, wolf (at Troizēn), wild boar, bear, and, of course, the stag and doe. On early gems she appears holding a water-bird by the neck, or a stag and lion. Of birds, the quail was her especial favorite. Lakes, marshes, rivers, and, hence, woodland trees and fish were under her protection, all of which are evidenced in many early cult names. Artemis Eurynomē, worshipped in Arkadia, suggests a fish-goddess, while at Phigaleia was invoked a goddess, said to have been Artemis, whose lower half was a fish's tail.

Though accounted a virgin goddess in all later classic literature, yet her chastity was never presented as a cult. In many places her office was the encouragement of child-bearing,

the assistance of women in labor, and the rearing of children, and in certain cults, like that in Ēlis and on Mt. Taygetos, it is even possible to find orgiastic and lascivious dances and phallic emblems.

Rare war functions are indicated by such cult titles as Eukleia (the glorious) and Sōteira (the savior) as which she strides in Amazon attire with a torch in each hand. A measure of care over mariners and travelers by sea is shown by the titles, Nēosoos, Ekbatēria and Euporia.

Altogether, whatever there was of spiritual, moral or intellectual force in her worship was the later outcome of the imagination of poets and artists. By these she is conventionally represented as a huntress with long chiton or short tunic and with the usual attributes of bow, arrow, and quiver or, sometimes, a spear. Often a dog accompanies her and, rarely, she rides in a chariot drawn by hinds. Occasionally one breast is exposed but her figure is never nude except when she is represented as discovered bathing by Aktaiōn. Of the animals mentioned above, the stag or doe is her conventional attendant. As a moon-goddess, with the crescent, she is shown only in later art, after her identification with Selēnē.

As a deity of the Under-world, she was Hekatē and, as such, her attributes were torches, keys, serpents and daggers or swords. The two last named types are of sufficient importance to be considered separately in sequence.

Of minor cults there was that of Amphipolis where she wears a polos or basin-shaped sun-dial on her head and, with a torch in each hand, rides a bull which suggests some connection with Eurōpē. The Artemis of Kolchis rides on serpents, and another type may be noted which holds a flower or a fir-apple. The Artemis of the Tauric Chersonesos wears the turret crown of Cybele.

On Etruscan gems she is often winged. The Roman Diana of the Aventine had a temple adorned with the horns of cattle instead of stags, and a cow was offered to her there. What seem to be representations of the Arician Diana show her with a stag, a dish of fruit and the bough which the slave broke

from the sacred tree as a challenge to her reigning priest, the *Rex Nemorensis*.

Most notable of the fusing of Eastern and Western ideas is the Artemis of Ephesos, a barbaric personification of the fructifying and all-nourishing powers of nature, worshipped with orgiastic rites. Her figure, with the breasts exposed, is swathed to the feet in a spiral, checquered or lozenge-lined garment. When covered with rows of breasts, as the figure often is, they are separated by parallel bands, but the details and decorations vary considerably. On either side of her are animals, conventionally stags or does, on her head is a barbaric head-dress of some kind and her hands, extending from her sides, hold either palm branches or what seem to be supports or fillets depending to the ground. Details of this famous idol vary, especially in later times when all cults found housing at Rome, and were more or less modified, but the main features hold closely. Other possible attributes are the lyre, spindle, birds, bees, lions, goats or vases. I know of no gem representation of the conventional type that can be dated before about 150 B. C.

In studying these variant forms we must bear in mind that Asia Minor was prolific of similar and even more strangely personified cults, of some of which we know little, of others next to nothing. There was the Artemis *Leukophrynē* at Magnesia in Lydia, the Artemis *Kolonē* at Sardis, the Artemis of *Pergē* in Pamphylia, and many others.

The Ionic adoption of this barbarian deity as an Artemis is only one manifestation of the many identifications and connections to which the peculiar vagueness and confusion of ideas which seem to have characterized her esoteric cult gave rise. It will be well to run over by name, briefly, her Oriental identifications, since, possibly, they may furnish an occasional interpretation of some otherwise cryptic gem. They include, besides those already mentioned, *Cybele*, *Bendis*, *Britomartis*, *Diktymia*, and, perhaps, *Ariadnē* and *Eurōpē*, all of which may have been local names of one goddess whose worship spread

through Phrygia and Thrace into Northern Greece and through Karia into Crete. The name of Artemis was also sometimes connected with such other foreign divinities as Astarte, Derketo, Atargatis, Anaitis, and Ma. Still further, the nymph Kyrēnē, Atalantē and Iphigeneia have all been held to be Greek forms of the same goddess.

Again, out of the principle of moral retribution connected with certain phases of the Artemis worship came the identification with or emanation of Nemesis (also to be treated of separately) and, through her, a connection with the Moirai or Fates, so, too with Adrasteia, twin sister of Nemesis and perhaps a local name of Cybele, detached at an early time, a mountain goddess whose attendants were the Idaian Daktyloi and whose close relation with Cybele was recognized in the Orphic cults. She was especially honored at Andros and Kos. Lastly, the name, Artemis Eileithyia, shows an identification with the goddess of childbirth who was honored at Olympia together with a male deity, Sōsipolis, who took the form of a serpent or a child and was probably the Zeus-Dionysos of Crete. Eileithyia was his foster-mother. The torch was her attribute.

SELĒNĒ—PHOIBĒ—LUCINA

(PL. XXVI, 18)

This early Greek goddess, later identified with Artemis, deserves separate consideration here, because her province as personification of the moon and the night gave much to the later art-type of the greater divinity. She was more specifically pictured as a bust between the horns of the crescent moon, sometimes with a diadem. Sometimes she had long wings, sometimes, crowned with a crescent, she rode in a chariot drawn by horses or by cows whose horns symbolized the moon. She is always draped and occasionally her veil is disposed in an arch above her head. Raised and inverted torches to indicate the rising and setting of her light were her familiar attributes.

HEKATĒ

(Pl. XXIX, 16)

The Chthonian form of Artemis, sometimes, later, confused with Persephonē, was prior to the fifth century represented as a single figure with torches as attributes. Her early provinces were manifold and varied. She gave aid in war, sat by kings in judgment, brought honor to horsemen and athletes, aided the hunter and the fisherman, joined with Hermēs in giving increase to the flocks and herds, and was a foster-mother to children. She was associated with Zeus Meilichios at Athens, and at Idrias in Karia the festival of the key was celebrated in her honor. Like the Artemis of Kolchis, she rides on serpents.

Her original moon affiliations are more doubtful and what she shows of these, as when, with rays on her head and two torches, she goes before the chariot of Hadēs, was probably drawn from her association with Artemis, since the double torches had reference to the night of the Under-world as well as to the rising and setting of the Moon.

She was closely connected with the Kabeiroi in Samothrace and with the witchcraft of Thessaly, and these relations, together with the gloomier phases of her Under-world powers, finally triumphed, so that her worship became one of the evil things that grew with the decline of pure Hellenism. Ghosts, witches, and the darker forms of magic owned her dominance. She haunted graves and crossways, accompanied by the dogs of the Styx.

It was not till after the time of Alkamenēs, the pupil of Pheidias, that the conventionalized representation of Hekatē, as three draped female figures joined back to back, took definite shape and became the controlling art motive. Its origin is vague and I have seen no hypothesis not open to grave objections. Certainly it voices the later and more unpleasant phase of the goddess. Good artists shunned it and I have found it pictured only on a few gems of the magic-working class. The

attributes which this tripartite deity holds are the torch, cord, key, serpent, dagger, lance, and scourge.

NEMESIS

(Pl. XXV, 4. See Pl. XIX, 3)

The figure of Nemesis on gems is not at all an uncommon one and the distinguishing characteristic of it is the peculiar bending of one arm with the elbow down and the hand raised as if about to pluck the robe from her breast. This gesture is found in many early Artemis pictures, indicating the connection between the two and that it is the Artemis-Nemesis type the artist has in mind. In later art she seems to have become a more distinct personality. Especial attributes of Artemis are missing, like the stag or doe, and she develops attributes of her own, such as the bridle, yoke, and measuring rod—symbols of control and proportion, the scourge and sword of punishment, and the wheel of swiftness. Very often this last quality is also evidenced by her being winged and, rarely, by picturing her seated in a chariot drawn by griffins, her sacred beasts. A branch or a patera is also a common attribute though not especially a distinctive one. She is always clothed.

Rhamnos near Athens, and Smyrna were the early seats of her cult.

LĒTŌ

The mother of Apollō and Artemis is rarely shown; only, I think, as fleeing with her two children from the wrath of Hēra.

ATHĒNA—PALLAS—MINERVA

(Pl. XI, 1; XIV, 2, 14; XX, 9; XXIII, 25; XXVIII, 18. See XXVI, 8)

Athēna was one of the few Greek divinities whose worship was never tainted with barbaric ideas, orgiastic excesses, impure symbolism or mystery. Attempts were made to identify her, probably as a war goddess, with Egyptian, Asiatic, Kol-

chian and Iberian deities of similar powers, but these identifications never took ground in Greece and came to little elsewhere. She was always, first of all, the goddess of the State, the incarnation of its laws and public virtues, and its protectress in war, all of which are evidenced in many of her cult titles. As ministering to these ends, she presided over the industrial arts (in Athens over the cultivation of the olive) and the life and growth of the family and was a patroness of athletics. She shared with Zeus the giving of Victory, and Nikē, whom we will consider next, was an emanation from her. Her cults, though evidencing little of the profound religious consciousness found in those of Zeus and Apollō, were always noble and a clear reflex of civilized Hellenic polity.

There are a few scattered cults that indicate her presidency over matters independent of those mentioned above; such as that of Athēna Hygeia at Athens in the sixth century B. C. and Athēna Aithyia (of the gulls) on the Megarid coast. Several others suggest control over the waters and the protection of mariners, but generally she personified no physical element. Torch-races were run in her honor.

The conventional representations of Athēna show her draped in a long tunic and sometimes with a mantle. She wears either the lofty crested Pheidian helmet or, less often, the unadorned Corinthian one, and is shown either rushing to battle as the Athēna Promachos or standing. Sometimes both shield and lance are raised, sometimes she leans on one with the other resting on the ground, as the peace-loving goddess who has achieved victory. Sometimes she then holds a patera and sometimes she pours a libation from it on an altar. More rarely she is pictured seated, and, occasionally, overthrowing an Earth-giant. Her conventional attributes are the olive branch, owl, serpent (as Athēna Hygeia and in Etruria), lance, helm, and shield which last often shows the Medousa head on it when the work is minute enough. Rarer attributes are a cock, a lamp or a distaff and spindle.

On several early gems she has wings (in Etruscan art she often has them as do many other deities); on one she is

shown with Diomēdēs in a chariot; on one she has a cornucopia and on another a mask, but these last two are exceptional and unique in spirit. In later art she sometimes holds a thunderbolt.

Athēna-Nikē (rare) holds a helmet in her hand.

NIKĒ—VICTORY

(Pl. V, 7; IX, 12, 13; XVIII, 22; XX, 12; XXI, 17; XXIII, 24; XXIV, 14, 15; XXV, 9; XXVIII, 18; XXIX, 7, 17)

Coming now to this emanation of Athēna, perhaps the most frequent of all the figures on gems, with the exception of Fortuna and, possibly, Hermēs, we find her generally represented in a tunic, often a short one, and sometimes with the upper part of her body nude. Very rarely she is altogether nude or with only a scarf or bit of drapery. Usually she is winged; always so, I think, in later times, and her conventional attributes are the palm branch or wreath. In rare instances, where she comes as a herald of victory, she bears a caduceus. A trophy, too, is a somewhat rarer attribute, and a candelabra, a very rare one. Once I have seen her pictured with an eagle, once casting dice, and once with a thunderbolt. Not infrequently she is figured sacrificing a bull, often writing on a shield and very often driving a chariot with two or four horses.

Nikē is also one of the commonest figures shown with other gods, often as a Victoriola borne in the hand of Zeus, Athēna, Fortuna or Arēs, and it is not unusual to find one or two Nikēs crowning a Jupiter Serapis, often between legionary standards and perhaps with an altar and an eagle, evidently a popular signet type for soldiers of the Middle and Lower Empire. It is also natural to find her worked in on gems in combination with sundry luck-bringing symbols.

ARĒS—MARS

(Pl. XXIII, 22—24. See Pl. XVII, 12; XIX, 4)

This god is very rare on Greek gems, but the types of

Mars Ultor and the Mars Gradivus striding forward with a trophy are common on Roman work of the Empire. The first is shown as a standing figure, with spear and shield resting on the ground. Mars Navalis was first figured after the Battle of Actium, his foot on the prow of a ship and holding a Victoriola in his hand. The face type is usually unbearded. In Greek archaic art and on gems of purely Roman character he wears armor; on Hellenistic gems or Roman that draw their inspiration from the Hellenistic, he is nude save for the helmet. Sometimes he is fighting an Earth-giant and occasionally he is shown with Cupid in some pose suggesting the latter's superiority.

His attributes beside the spear, shield, Victoriola and trophy, are, more rarely, the torch, wreath or palm branch. The wolf and the woodpecker were sacred to him in the animal world, but they attend him on gems very rarely. The ram was sacrificed to him.

APHRODITĒ—VENUS

(Pl. VII, 11, 15; VIII, 20, 23; IX, 3, 15; XIV, 11; XV, 4, 8, 12;

XIX, 8?, 10, 13?; XX, 10; XXII, 5; XXIII, 6, 10, 21;

XXIV, 10—12)

This goddess, more or less popular in all times, was originally an Earth-divinity of probably Oriental origin. Her numerous identifications with barbaric deities, such as Ishtar, Attar, Atargatis, Astarte, Derketo, Belit, Mylitta, and Tanit, connect her with the Assyrian, Aramaic, Canaanite, and Phœnician theologies; Anaitis takes her into the Persian, and Allat, among the Syro-Arabians. There also seems to have been identification in some Greek cults with Athēna, Pasiphaē, and, possibly, with Eurōpē, Ariadnē, Harmonia, Hippodameia, and Phaidra.

As Aphroditē-Persephonē there was a certain Under-world relation and, thence, a connection with the Fates, Furies, and Nemesis. Here the poppy and the tortoise were sacred to her and this idea was current in Etruria.

As Aphroditē Epitragia, a cult of the Attic coast, she rides a goat, and at Thespiæ she was worshiped as a Moon-goddess, under the name of Aphroditē Melainis and with the crescent as a symbol.

She was even a war-goddess in some Greek cults, and civic and political provinces came to her as a goddess of marriage and birth. Her control of human fruitfulness, first on moral lines and, later, without restrictions, doubtless grew out of her early care over the produce of the soil which gave her the kalathos as an emblem, not appearing, however, to my knowledge on any gem, though I have found the cornucopia in one instance. As a city goddess she wore the turret crown in art, but neither has this been identified on any gems I have seen. It is always possible, however, and, as an attribute, may have led to the identification with Cybele.

As a sea-goddess, suggested by her birth, her cults were wider and more enduring and carried with them such attributes as the rudder, prow, dolphin, and mussel-shell. Horses, especially sea-horses, and other sea-monsters, occur with her on gems but it is usually doubtful whether such representations are of Aphroditē or of Amphitritē. As Aphroditē Euploia (of the fair voyage) and under like titles she may be figured with any appropriate attribute.

Coming down, however, to the usual gem pictures, it is Aphroditē the woman that prevails through Greek art and that inspired the work of the gem-engravers. Usually draped in early art, an altogether modest representation; in Hellenistic times the drapery was apt to be very slight or non-existent: a scarf, a mantle which has slipped down about the legs leaving the body nude, or, following the ideals of the Hellenistic sculptors, she appears entirely nude, as if coming from the bath or born from the sea. An early gem shows her draped and rising from a flower, and the Aphroditē Urania, the celestial Aphroditē, daughter of Zeus and Harmonia instead of Dionē as in the generally accepted legend, is always draped. In this phase she was adopted at Rome as the Venus Genetrix or Mother of Æneas and, thence, of the Roman people. The

tortoise seems to have been an attribute of this type as well as of the Chthonian Aphroditē. It was under Julius Cæsar, who adopted the Venus Victrix as his patron goddess and wore her on his signet, that the Venus Genetrix representation was changed to fit his taste and that of his times, and the conventionalized form commonest on Roman gems took shape. This statue type which occurs in numerous gem engravings of all degrees of merit, shows the goddess beside a column, her weight resting on one leg, the other flexed, with a shield beside her and carrying a spear while she holds a helmet in one hand. Naturally the details were sometimes varied on the gems.

Through all Greek and Græco-Roman art there are many gem pictures of Aphroditē and Venus in all kinds of what may be called genre scenes. Erōs and, later, Cupid, and his attributes such as bow, quiver, torch, and butterfly are shown with her in all manner of compositions. Sometimes she has a shield in other than the Victrix type. Here one foot is apt to rest on a slight elevation and the figure seems more akin to that of Nikē. Priapic Herms also occur in Venus pictures on later gems, both Greek and Græco-Roman. The legends of her loves are found illustrated rather more rarely. Altogether, there is little of the courtesan in Aphroditic art, as there was little in her worship until it became corrupted in degenerate times.

Attributes other than those already mentioned are the mirror and the dove, also the swan, swallow, sparrow, and the myrtle, rose, apple, and bathing urn—all undoubtedly more or less rare. Rarer still is the bull, and an unidentified bird, called the iynx, was also sacred to her. Eastern emblems are the griffin, roe, and egg. The Graces and, sometimes, but less typically, the Seasons, attend her in mythology, but I do not know of them on ancient gems. Aphroditē was apt to be a subject favored by the better artists, and these were generally hostile to compositions containing more than two figures.

THE CHARITES—GRACES

In art these were first represented draped. Later they

were shown nude and either joining hands or embracing. Common on modern gems, I have never seen them on an ancient one.

ERŌS—AMOR—CUPID

(Pl. V, 21; VII, 4, 11, 15; IX, 3, 4; XII, 25; XIV, 11; XV, 3, 4, 7, 8;
XVIII, 9, 10; XIX, 5; XX, 10; XXI, 3; XXIII, 8;
XXIV, 1—3, 6—8, 12; XXV, 2; XXVI, 9;
XXVII, 18; XXIX, 8, 9, 18)

Perhaps one of the oldest seats of the worship of Erōs was Thespiæ in Bœotia where his image was, like most of the earliest representations of Greek gods, a rough unhewn stone.

His developments were governed by artistic rather than by cult influences. For this reason he is shown in more varied poses and occupations than any other divinity and, in Roman times, when Amor or Cupid, not a native deity, was evolved as a mere adaptation of Erōs, he had little religious significance, and the fantastic and humorous were allowed full swing in the art that may be said to have utilized him.

All the earlier Greek artists represented him as a beautiful boy just verging upon youth, nearly always nude and with wings. After Alexander the childish type, so well known to modern art, began to take shape and finally became the conventional form under which he was pictured.

Of course his characteristic associations are with Aphroditē and with Psychē, but there is hardly any occupation in which he is not or may not be found. It may be well to add in this connection that, from the general appeal of the subject, Cupid pictures are common among the forgeries, and the broad scope of the genuine work makes it rather more difficult than with other figures to distinguish the false.

His regular attributes are the bow, arrow, quiver, and torch.

PSYCHĒ

(Pl. XI, 23?; XIX, 3, 10, 14; XXIV, 5; XXVI, 2; XXIX, 9)

From her constant association with Erōs, Psychē should

be considered in this connection. A late appearance in Greek story and art, we nevertheless find the soul represented as a butterfly or a maid with butterfly's wings as early as the sixth century, B. C. She is quite common in Hellenistic and later pictures, nearly always draped or partly so and winged, generally with butterfly wings. The butterfly was her emblem and, by its appearance in the field of gems, frequently serves to identify an otherwise uncertain figure or head. Down to the end of Græco-Roman art she was often pictured as a butterfly. On one gem I find her with a torch, on another, with a caduceus, evidently symbolic of Hermēs in his psychopompic character.

There seems to have been some connection between Psychē and Nemesis, as we find representations of a maiden with typical bent arm and the butterfly, also busts with a veil thrown over the back of the head and a butterfly in the field, which probably have reference to this association of ideas.

DIONYSOS—IACCHOS—BACCHUS—LIBER

(PL. VII, 3; XIV, 6, 13; XV, 13; XVIII, 8; XIX, 1; XX, 13; XXI, 21; XXII, 2; XXIII, 5; XXVIII, 17)

Pre-eminently an Earth-god and adored as such, with Dēmētēr and Persephonē, the cults of Dionysos were widespread and the Oriental element is more or less prominent in most of them. His was a worship most difficult to maintain in Hellenic purity, most susceptible to barbaric influences and to degenerate into all manner of orgiastic excesses and licentious rites. He is common on gems, especially on those of the later developments.

In early Greek and Etruscan art he is always represented robed, bearded, generally crowned with the vine, and of benignant aspect. This type pertained through all time as an archaism, though the dignity of it was often lost in the emphasis of the vicious tendencies of his worship. Later representations altogether favored the beautiful youth and, occasionally, the child type, often of an effeminate aspect and generally nude or nearly so. In one class of distinctly effeminate representa-

tions he wears a long garment. He is seldom throned but often in a reclining posture and sometimes riding a panther or in a chariot drawn by these, his favored beasts. Also the bull, lion, fawn, lynx, tiger, ass, goat, serpent, and dolphin were sacred to him, and he wears, often, a panther's or a fawn's skin. The goose, too, seems to have been related to many Dionysiac and kindred Aphroditic cults. His typical attributes are the thyrsos, wine cup, grapes, vine, laurel, ivy, and rose. A comedy mask was a not uncommon attribute, as of one who presided as a genial god over poetry, music, and the drama and was thus related to Aphroditē, Erōs, the Graces, and the Muses. Sometimes, even, he is symbolized by a mask. His relation to Apollō seems, rather, to be based on his inspiring to prophecy. His most ancient images displayed the phallus as an emblem of generative power, but I do not know of this idea being emphasized on a gem. On one Etruscan scarab he carries a cornucopia, and on an early Greek vase he rides a bull.

His companions in later art, when he is not shown alone, are Seilēnos or one or more satyrs, nymphs or bacchantes and, of course, his mythological life is sometimes pictured, as with Ariadnē.

As Zagreus, the horned child of Zeus and of Persephonē or Dēmētēr, his Under-world associations are emphasized and his being born anew symbolizes the spring vegetation. The Orphic cults had special regard for this phase of him but I have never seen a gem that seems to express it.

Most prominent among his Eastern identifications is that with the Thracian and Phrygian god, Sabazios, who was, sometimes, also identified with Zeus and whose orgiastic worship, closely affiliated with that of Rhea-Cybele and Attis, was introduced into Athens in the fifth century B. C. and, in the days of later paganism, was widely spread in Italy. Also a god of dying and reviving nature, his especial emblem was the serpent. The gem artists seem to have neglected him but he is possible on unexplained or new stones.

The Italian Liber, god of wine, was also identified with Dionysos.

SEILĒNOS

(Pl. IV, 1; V, 1, 23; VI, 7, 11; XII, 13; XIII, 8; XIX, 1.

See XXI, 13; XXVII, 3, 4)

Of the lesser divinities that are connected with Dionysos or Bacchus, Seilēnos is the most important, both intrinsically and on the score of his frequent appearance on gems. A primitive woodland and fountain deity in Asia Minor, with a care over animals and gifted with music and prophecy, he was taken up by Greece as the son of Pan or Hermēs and a nymph, the oldest of the satyrs and the teacher of Dionysos. In later art he is just a drunken old satyr, often accompanied by a goat or riding on one or on an ass. Sometimes a rooster or a hare, but usually the amphora, wine cup or wine skin is found with him. Not infrequently on Etruscan gems he is sailing on an amphora or on a raft supported by them, and, throughout the early Italian cycle, he seems to be closely related to Hēraklēs. On one gem he is shown with a sphinx, on one with a lyre, and on a third, an archaic Greek stone, he is pronouncedly ithyphallic and drives a chariot drawn by lions.

His figure is nearly always naked, that of an aged satyr, with a tail, often with animal ears, snub-nosed, bearded, usually pot-bellied, and sometimes with a hairy body. Occasionally he has little horns.

In early Greek, Phoenician, and Etruscan art his figure was undoubtedly powerful in some way as an amulet, though, even then, he seems also to have been pictured solely with an eye to the humorous possibilities which controlled in so many later gems. Likewise, a Seilēnos mask was often engraved for its talismanic power, and when the Roman symplegmata became the fashionable charms it was usually worked into the design.

SATYRS

(Pl. VIII, 18, 22; XVI, 13; XVIII, 7; XIX, 1)

These figures belong especially in the Bacchic cycle. They are common in gem pictures as purely art motives rather than as expressing any religious idea, and their occupations are

varied, though primarily those that lie within the province of Dionysos. They are pictured with amphoras, wine cups, and wine skins; drinking, pouring wine, and exhilarated or somnolent from its effects; dancing, playing flutes or cymbals, drawing the garment from some sleeping nymph or struggling with her, playing with Cupid or an animal, usually a goat, and in compositions akin to what we call genre, but, as a rule, sportive or humorous. We do not find them on early gems when the ideas of wearers were more serious and the Bacchic cycle unpopular, but in Hellenistic art and still more in Græco-Roman their place is well established.

Their figures are generally nude or nearly so, their hair disordered, sometimes crowned with wreaths, and their pointed ears and little horns are often shown. Sometimes they are ithyphallic but the tail is their most distinguishing characteristic. The pedum or shepherd's crook is a not uncommon attribute and also the thyrsos or, for that matter, any of the emblems of Dionysos.

The satyr, Marsyas, is indicated by his flute, or he is shown bound to a tree and about to be flayed by Apollō (Pl. XXIV, 13).

PAN—FAUNUS

(Pl. VII, 14; VIII, 21?; XXI, 21?)

Belonging to the Dionysiac cycle, Pan was originally an Arkadian nature-god of woodlands and a protector of flocks. He also became a god of prophecy. Before the time of Praxitelēs he is shown in human form but with horns sprouting from his head and bearing a shepherd's pipe or a pedum. Later, the goat's legs were given him but the earlier representation was by no means given up, especially where either an archaizing tendency or taste for the more attractive figure as opposed to the grotesque dominated. Common attributes were a garland or twigs of pine and a tortoise. Greek gems of the good period show him with a bird in his hand. The Romans identified him with the Italian Faunus or good spirit of the woods.

NYMPHS

(Pl. IV, 19; XV, 5?, 7?, 10; XXII, 10)

Lowest, together with the satyrs, among the divinities, these personifications of Nature in her specific forms are the loveliest of all the creations of Greek mythology, and, though connected in many ways with many gods, yet seem to fall naturally in place here as belonging, for the most part, on gems at least, to the Bacchic cycle.

They are pictured as beautiful maidens, nude or lightly clothed, and often with flowers or garlands. The satyrs are their familiar companions. Also they are shown with Dionysos and may appear with Pan, Hēraklēs, Artemis, Apollō, Hermēs or in many other associations. The sea and ocean nymphs, Nērēids and Ōkeanids, are the natural companions of Poseidōn and his Tritōns. Shells, dolphins, sea-monsters and other emblems of the sea are their appropriate attributes. The naiads, nymphs of streams and fountains, are often shown drawing water or carrying it in an urn. Besides these are the dryads or hamadryads, wood-nymphs each of whom was supposed to have her life associated with that of some particular tree. The oreads are the nymphs of the hills. The Nērēid, Galēnē, shown as the head and shoulders of a girl swimming, is a common type of Hellenistic art (Pl. XV, 10).

BACCHANTES

(Pl. VIII, 22; IX, 6, 8; XIV, 9; XXI, 20)

Bacchantes, or Mainads, while not necessarily divine personages, are yet often nymphs. They are the especial companions of Dionysos and typify the influence of the wine-god. Wreathed with vine leaves and lightly clothed with fawn skins or fluttering draperies, they are the embodiment of revelling enthusiasm. Dancing, rushing madly forward, or overcome by wine, they bear thyrsi, cymbals, swords, dismembered kids or roe-calves and, sometimes, even serpents.

HERMĒS—MERCURIUS

(PL IV, 17; V, 17; VIII, 15; XII, 1, 2, 5, 8, 10, 19; XIII, 19; XVII, 11; XX, 2; XXII, 12; XXIII, 14—16. See XXVI, 5, 6)

As the deity presiding over worldly and, more especially, commercial prosperity, Hermēs is naturally one of the three or four commonest figures on gem signets.

Originally, like most early divinities, an Earth-god of harvests and flocks, with the usual Chthonian relations, his later provinces grew out of the establishment of commerce and the fact that his development best fitted him for the place. Mercurius, his Roman identification, seems to have been a trade god from pretty early times.

The first distinctive figures of Hermēs, derived from the column that personified all the gods in barbaric times, was what we know as the Herm, a square pillar surmounted by a bearded head and equipped with a phallus, and this representation pertains through all art along with the most artistic later conceptions. Herms were set up by the roadways, especially at cross-roads, and came to symbolize the God's care over these means of civilized communication.

As the protector of flocks and herds, his early province extends down into the latest times. He is pictured with a sheep or a ram, often riding on one.

His Chthonian character, too, maintained itself, perhaps fostered by the cult brotherhoods of Italy, and the Hermēs Psychopompos (conductor of souls) is shown on a long line of gems where he appears with the half figure of a man issuing out of the ground or from a jar symbolic of the Under-world. Sometimes the soul is typified as a human-headed swan, a butterfly or a girl with butterfly wings, whence the Psychē myth. As such he was later identified with the Egyptian Anubis. As a god of sleep and dreams he is closely related to Hypnos. His control over buried treasure was a natural resultant of wealth-giving and Under-world power. His mythological character showed him as the master of all manner of cleverness, craft, lying, chicanery, even to the point of theft.

In fact, he was the especial patron of thieves. As herald and messenger of the gods, he was invested with the diplomacy necessary in one having ambassadorial functions and, thence, again, probably came the Hermēs Logios, god of eloquence.

As a patron god of the palaistra and all manner of gymnastic sports, it was as an exponent of skill rather than of mere strength that he held his place. As such his attribute was the strigil and, sometimes, the palm tree, as the source of the oil used by athletes.

His inventions were many, including the lyre, whence the tortoise was sacred to him, the shepherd's pipe, and even, according to later times, letters, figures, mathematics, and astronomy. As god of trade he carries a purse.

His figure in early art was often bearded, as were the Herm heads. Generally, however, and always in late representations, he is beardless. Occasionally robed on archaic Greek gems, in all later art he is either nude or wears a mantle, short traveling cloak or some light bit of drapery.

Besides those already referred to, his typical attributes extending through all times are the petasos or broad-brimmed traveling hat, sometimes winged, the winged sandals, and, pre-eminently, the caduceus or herald's staff, originally a rod about the end of which two short branches intertwined, and, later, the conventional form: a rod twined with two serpents whose heads rise, facing, above the end. The rooster is his most common attendant, possibly on the score of its reputation for being wide-awake, and on one gem a rooster is engraved wearing the petasos and holding a caduceus. A unique specimen shows Hermēs rolling a hoop, possibly as an emblem of fortune.

HĒPHAISTOS—VULCAN

This god is a very rare figure on gems. In ancient art he wears a semi-oval cap and a tunic which leaves one arm and shoulder bare. He is bearded, but on one of the few Hēphaistos gems, an Etruscan scarab, Sethlans, the Etruscan Vulcan, is shown smooth-faced. His attributes are the hammer, tongs, and other instruments of the iron-worker's craft.

CHAPTER II

LESSER AND LATER DEITIES WITH THEIR ATTRIBUTES—MONSTERS

TYCHĒ—FORTUNA

(Pl. XXV, 9, 21; XXIX, 7, 17. See Pl. XIV, 12)

AMONG the lesser divinities, many of whom were personifications of different virtues, the most important to the student of gems, as being the commonest of all figures on these, is Fortuna. She does not seem to be found on early signets, though the temple of the Fortuna of Præneste, with its oracle given by the famous Sortes Prænestinæ (Prænestian lots), was a center of Italian pilgrimage from very ancient times. With the growth of the more material superstitions in the Hellenistic Age, however, Fortuna was widely worshipped, as the personification of prosperity and, in Roman times, down to the latest art, she is shown in a very considerable proportion of the gem-pictures, usually as a single figure, but often with other deities; sometimes seated but, as a rule, standing.

She is nearly always draped, a few half-draped figures being of rather doubtful identification, and, sometimes, a veil hangs at the back of her head.

Her attributes are, first and foremost, the cornucopia, symbol of the gifts of nature, and the rudder or steering oar, as guiding the affairs of the World. Rarer, is the wheel or ball at her feet, typifying her unsteadiness.

There were many local cults that may be within the lines of probable representation, such as the Tychē of Antioch, sculptured by Eutykhēs as a seated figure with a mural crown and with wheat-ears in her hand.

Also, through later times and in the general mixture of deities and cults, it is not uncommon to find other goddesses with attributes of Fortuna or Fortuna with theirs, such, for instance, as an Artemis-Tychē.

ASKLĒPIOS—ÆSCULAPIUS

(Pl. XXIV, 19)

The worship of Asklēpios, son of Apollō and god of healing, was widespread in Greece, especially in Peloponnesos. Pergamos, Triikka in Thessaly, and Kos, all were centers of his cult, and in Rome Æsculapius was especially honored after 293 B. C.

He is not uncommon on gems and is represented as a bearded man, nearly always in a long himation or mantle, though on one gem given in Furtwängler he is shown nude. His attribute is a staff around which a serpent twines. A cock was sacrificed to him. His attendants, when he has them, are his daughter, Hygeia, and the boy, Telesphoros.

In later Roman art, Æsculapius was one of the deities confounded with the Egyptian Serapis.

HYGEIA

(Pl. XXII, 8; XXIV, 19)

The daughter of Asklēpios is shown on gems as a maiden, generally draped, rarely half nude, and giving drink to a serpent.

TELESPHOROS

Pictured as a boy, the deity of recovery appears occasionally with Asklēpios or Hygeia.

RHEA—KUBELĒ (CYBELE)—MAGNA MATER

(Pl. I, 5; XXIII, 1)

The cult of Rhea, mother of Zeus and his brothers and sisters, and worshipped in Rome as Magna Mater, was prom-

inent in Greece. Not identical with Gaia or Dēmētēr, she was nevertheless closely allied to them as an Earth-goddess, a personification of the procreative power of Nature. She seems to have been the central figure of early Cretan theology where the ox, serpent and lion were her attributes. Flowers and fruits were naturally under her care. There, also, she was a war-goddess with spear, bow, and helmet, and she seems to have had some orgiastic character which was lost when she became popular on the mainland of Greece, as being foreign to Hellenic ideas and refinement. Pheidias sculptured her as a benign matron with a lion and a tympanum or small drum. In one sense she should hardly be classed among the lesser divinities, but her real prominence throughout classical times seems to have depended almost entirely on her identification with other goddesses.

Whether Rhea was originally the same as the Phrygian Cybele is not certain but that she was later pretty thoroughly merged in her is clear. As Cybele she was not favored in Greece, where such rites as hers, the extreme of the orgiastic, were regarded with little favor, but in Rome of a later day the popularity of her worship was very marked, even extending down beyond the Christian supremacy and making its influence felt in heretical sects.

As the founder of cities, the mural crown, a diadem of towers, was Cybele's attribute, but, even more generally, the tympanum and the lion. She is usually shown either enthroned between lions, in a chariot drawn by them or riding on one. Also, the oak and pine were sacred to her.

A goddess of many associations and admixtures, both Artemis and Aphroditē were confounded with her in some cults and, as the former, she has the crescent moon on one gem.

At Rome the worship of Magna Mater was introduced from Phrygia in 204 B. C. The sacred black stone, her emblem, was brought from that country and installed in a temple built for it on the Palatine Hill.

SYRIA DEA

(Pl. XXIII, 17)

This deity of generation and fecundity, worshipped in Syria under the name of Atargatis, was introduced into Greece after the death of Alexander and spread to Rome under the Empire. We find her, according to the custom of later paganism, with a long list of identifications and connections, and she shares the attributes of Juno, Venus, Rhea, Cybele, Minerva, Diana, and others. On Roman monuments she is, generally, like Cybele, enthroned between lions. The fish was sacred to her.

KOURĒTES, KABEIROI, IDAIAN DAKTYLOI

(See Pl. XXVI, 29)

The Cretan Kourētes, the Idaian Daktyloi of Phrygia and Crete, and the Kabeiroi of Samothrace, seem all to have been in the nature of magicians and demonic smiths, with control, primarily, over the working of metals. The first named, according to legend, had, by striking their spears against their shields, drowned the cries of the infant Zeus, so that Kronos could not find and destroy him; the second had mysteries in many places and secured their initiates against disaster, especially by sea, and the last named, besides having powers over nature and patronage of music and rhythm, also afforded magical protection against perils.

All of them were more or less identified with the worship of Rhea and Cybele, and, from their mysterious magic-working influence, we would naturally expect their appearance on gems.

The hammer and, possibly as to the Kabeiroi, the rhyton, a peculiar kind of drinking cup ending in an animal's head, are attributes that might serve to identify them, but they may usually be suspected in figures of metal workers, especially when these have any dwarfish or demonic aspect,—perhaps, also, the not uncommon dwarf riding a sea-horse or sailing on an amphora, may be one of the Daktyloi. Little definite

is known about their worship which seems to have been, for the most part, mysteries, and an atmosphere of vagueness envelops the subject.

GAIA—TELLUS

(See Pl. IV, 8; XXVI, 17)

I do not know that the figure of Gaia, the original Earth-goddess according to the Theogeny of Hesiod, or of Tellus, her Roman equivalent, has ever been found on a gem. In later Hellenistic art she was represented as a draped, matronly woman with children in her lap and cattle around her, or amid figures that personify fire or water. At Athens she was worshipped as Gaia Kourotrophos, the nourisher of children, and as Gaia Chthonios, a deity of the Under-world, to whom were offered seven black lambs. At Delphi she was honored as the primeval prophetess who sent forth the inspiring Earth-vapors.

Eurōpē has been regarded as a Creto-Bœotian form of Gaia, and Themis, her daughter, goddess of law and order, who sometimes was pictured riding a bull, was an emanation from her. Conventional later representations of Themis show a stately, robed woman holding a pair of scales and a cornucopia to symbolize the blessings of order.

ŌKEANOS—OCEANUS

In ancient Greek mythology the River of the World which bounds the Earth and Sea was personified, in art, as a venerable man with a long beard and bull's horns on his head; on coins, as a man-headed bull. Crabs' claws are also attributes, but he seems to be very rare or non-occurrent on the gems.

MELIKERTĒS

A Greek sea-deity, perhaps derived originally from the Phœnician Melkart and identified with Palaimōn and the Roman Portunus, god of harbors, is shown in art mounted

or reclining on a dolphin. Megara and Korinth were especial seats of his worship, but it extended throughout the Mediterranean coasts.

GLAUKOS

In art he is usually the sea-deity,—an old man with long beard and hair, a fish's tail, and shells as attributes,—a difficult figure to distinguish on gems from the common Tritōn.

The Cretan Glaukos, son of Minōs, may be shown in the honey jar into which he fell and met his death, to be afterward brought to life by the seer, Polyeidōs.

THANATOS

(Pl. XXIV, 9. See Pl. XIII, 15)

The Greek personification of Death is shown as a nude figure, usually winged, with crossed legs to symbolize rest and holding a lowered torch or leaning on an extinguished one. Several winged figures on Etruscan scarabs may be Thanatos, most plausibly one that is shown bending over an urn and another that, together with a winged woman, possibly Eōs, is bearing away a dead hero (Memnōn). Later Roman representations are only to be distinguished from those of Cupid by the crossed legs and the reversed torch. Furtwängler has interpreted a figure with the reversed torch but whose legs are not crossed as symbolizing wearied love.

HYPNOS

(Pl. XIX, 19; XXIV, 17; XXV, 5)

The personification of sleep was pictured in ancient art under various forms; often with the wings of an eagle or a butterfly on his head. Sometimes he holds a poppy or a horn from which he drops slumber. One Etruscan scarab shows a winged figure of an old man holding a twig and standing over a weary Hēraklēs, doubtless a Hypnos, as is a similar figure with a sleeping woman on his knees.

MORPHEUS

The Greek Oneiroi (dreams) have not been to my knowledge pictured on gems. Hēsiod called them the children of night; brothers and sisters of Hypnos and Thanatos. Later, they were held to be sons of Hypnos. Morpheus, the best known, appeared only in human form and was shown in art as an old man pouring from a horn. He was worshipped especially at places where there were dream-oracles and at shrines of Asklēpios. Ikelos took the shape of a man or of any kind of animal and typified the oppressive dreams we call night-mares. Phantasos appeared in the guise of some inanimate object.

EUTHĒNIA—ABUNDANTIA

(Pl. XXV, 18)

Euthēnia is represented in art as a woman with poppies or wheat-ears. At Alexandria she was pictured supported by a sphinx, at Thyria with a goblet. The Roman personification of abundance may well be common on gems, and where we find a female figure with the cornucopia of Fortuna but without the rudder, Abundantia may be suspected. As a gem subject, however, she yields in talismanic suggestiveness to Fortuna and would, naturally, be used much less frequently.

HĒBĒ—JUVENTAS

Daughter of Zeus and Hēra, cup-bearer of the gods, goddess of eternal youth, and identified with the Roman Juventas, Hēbē is very rare on gems. In art she is generally represented draped, often with wings and pouring nectar from a vase. A branch, also, is a frequent attribute.

As the wife of Hēraklēs she was worshipped with him, especially at Sikyōn and Phleious, sometimes under the name of Dia or of Ganymēda, an identification with her male successor in office of divine cup-bearer.

GANYMĒDĒS

(Pl. X, 6)

Ganymēdēs, the beautiful shepherd boy who, according to the Homeric myth, was carried off by Zeus under the form of an eagle to succeed Hēbē as the divine cup-bearer after she had become the bride of the deified Hēraklēs, is represented not very infrequently on later gems. He is generally shown as a naked youth with the eagle descending upon him or bearing him away or else drinking from a cup which he holds. Sometimes he carries a pedum, sometimes a dog or one of his flock is beside him and sometimes he wears the Phrygian cap to indicate his Trojan origin.

IRIS

Greek personification of the rainbow and especial messenger of Hēra and sometimes of Zeus, Iris is figured in ancient art draped and with wings; occasionally, also, she has winged feet. She carries the caduceus of Hermēs and, sometimes, a vase.

ĒŌS—AURORA

(Pl. VIII, 9. See Pl. XI, 24; XIII, 15)

Ēōs is usually shown on late gems, either in a chariot or, winged and draped, hovering in the sky or moving before Arēs. Sometimes she carries a torch or sprinkles dew from a vase. On Etruscan scarabs a winged female carrying a dead hero is, probably, Ēōs bearing away the body of her son, Memnōn, slain before Troy, and on one probable picture of her there is a serpent engraved in the field of the gem.

METHĒ

This deity, who presided over drunkenness and is said to have been engraved on the signet of Kleopatra, is a nude female figure, with such attributes as a cup, hydra, thyrsos, vine branch or grapes.

PRIAPOS

(Pl. XV, 4)

The god of fertility and generation is usually pictured as a Herm with phallic symbols and thyrsos, club or sickle. In early art various ithyphallic figures may represent him.

MOIRAI—PARCÆ

(Pl. XIV, 3)

The Fates, though well known in art, are not much in the line of gem subjects. Little was to be gained by flattering or striving to propitiate such inexorable deities. In art Klōthō is shown spinning the thread of life, Lachesis marking out the destinies of men on a globe, and Atropos severing the thread with her shears, showing the hour on a sundial, drawing a lot or holding scales. Occasionally they have wings on their heads.

EUMENIDES—ERINYES

The Furies, avengers of crime, are also not found on gems, except, perhaps, in the composition of some hero-picture, possibly with Orestēs. In such a rôle the Fury might be difficult to identify except from the context.

In early art they were representations of terror, with long robes and twining serpents for hair. Later, they were softened into beautiful virgins, with or without snakes about their heads, sometimes with wings and carrying torches, scourges or sickles.

MEDOUSA

(Pl. V, 10, 22; VI, 6?; XI, 14; XII, 9; XVIII, 18; XX, 8; XXI, 4; XXII, 1; XXIX, 21)

The figure or head of this one of the Gorgōns best known in art was always considered a most powerful talisman and appears on the gems of all periods; often together with other luck-bringing types and emblems.

In all early representations, Phœnician, archaic Greek, and Etruscan, she is a thing of horror and fear, with bristling serpent hair, distorted face, and, often, protruding tongue. In Phœnician art the figure is usually naked, with wings, and often with a second pair which are sometimes attached to her legs. On archaic Greek and Etruscan gems, she is robed, usually with wings or double wings, sometimes brandishing serpents, and, once, with Hēraklēs, where both are holding up lions. On Etruscan scarabs she is also pictured being slain by Perseus or he is seen bearing the severed head. In early Roman art we find usually the head, either in the hands of Perseus or fixed on the shield or breastplate of Athēna or of some hero.

In later art it is the head alone that is a favored gem picture, and its horrors are eliminated with the exception of the serpent hair which is, often, merely suggested in a way to take nothing from the beauty which now generally characterizes the face. On these heads, also, there is apt to be a pair of wings.

HŌRAI

Varied at different times and places as to their number and names, the Hours or Seasons were attendants of Aphroditē, though less typically so than were the Graces. Originally they were Eunomia, Eirēnē and Dikē.

Eirēnē, goddess of peace and identified with the Roman Pax, was also worshipped as a goddess of wealth and is represented as such, with the infant Ploutos in her arms. Her attributes are the cornucopia, olive branch, ears of wheat, caduceus, and, on one gem, a sceptre. Rarely she is winged. As Pax she carries an olive branch.

Astraia, later identified with Dikē (Justice), was the Virgo of the constellations. Her attributes are the scales or a crown of stars. A harvest season sign, she often carries a wheat-ear on gems of Imperial times.

There were, also, four Hōrai who represented specifically the four seasons. Of these the best known, Chlōris, goddess of

spring and flowers, was identified with the Roman Flora. If found on ancient gems she would probably be crowned with flowers or holding them and difficult to attribute with much certainty. She is especially dangerous, as being more or less a favorite in modern work.

ÆQUITAS

(Pl. XXV, 16)

This Roman personification of the fairness that represents the spirit rather than the letter of the law, needs a separate heading as being not infrequent on Roman gems. The scales are her attribute.

VERTUMNUS AND POMONA

Latin god and goddess of the fruits of the Earth, who presided over the changing year. I have found neither on gems. Art attributes were fruits or the pruning knife.

SATURN

(See Pl. XXI, 19?)

An ancient Italian god of sowing and harvest, later identified with the Greek Kronos. The sickle was his symbol.

JANUS

(Pl. XXVIII, 13)

This Roman god appears occasionally on the gems as two bearded heads with the backs combined, as in the Roman *æs*. Bearded double masks, back to back, may be meant to represent him. As the porter of the gates of Heaven, the staff and key were his attributes. In very late art he is sometimes shown unbearded and in one hand he holds the number 300 (CCC), in the other 65 (LXV), as indicating the days of the year. This, however, would hardly be found on a gem.

VEIOVIS

Also an old Italian deity, early forgotten and unlikely on gems. He was identified with Apollō, Zeus and, later, with Dis. A goat was sacrificed to him. In early art he was pictured beardless and with a bunch of arrows, which was, also, one of the conventional representations of a thunderbolt, but his cult seems to have died out at an early date.

HERMAPHRODITOS

The bisexual figure, derived etymologically from Hermēs and Aphroditē, was a favorite subject in later art. Artistically a creation of fancy, it did not appear before the fourth century B. C., was connected with the Dionysiac and Erotic cycles, and bore their attributes rather indiscriminately. Indicated by the bosom of a woman and masculine genitals, the type appears occasionally on gems.

DEA ROMA

(Pl. XXV, 3)

Foremost in frequency in gem pictures among the long list of Roman personifications, most of which appear seldom or never on gems, is the rather popular figure of the World-conquering city, worshipped, first, in the second century, in Asia Minor, as a form of Tychē, with a mural crown and various attributes of power and prosperity. Under Augustus the cult in many Hellenic cities was connected with that of the deified Julius Cæsar and with the complimentary worship of the Emperor. She seems to have been associated with Venus Genetrix, and a double temple to both was built in Rome by Hadrian. In her own city she was represented as a fully draped figure with helmet, shield, and spear, often difficult to distinguish from Minerva, except in such cases as on the gem where the shepherd Faustulus and the wolf stand before her. On Roman coins her head is often shown with a winged helmet. Other city types appear on later gems and

must be identified when found, *secundum artem*. (See Pl. XXV, 21; XXVIII, 20).

LIBYA

(Pl. XVIII, 23)

This personification of the province of Africa is indicated by the elephant skin head-dress with tusks and trunk.

ÆTERNITAS

This personification holds in her hands Sol and Luna. It has not been found on gems, but the symbols of the Sun and Moon were figured in late, especially in Oriental, art, as typifying eternity—that is, so long as these heavenly bodies shall endure.

ANNONA (YEAR'S PRODUCE)

The patroness of corn importation, personified at a rather late date, had as attributes the kalathos, ears of wheat, a cornucopia, and a ship. She carried a figure of Roma in her hand. I have seen no gems.

CONCORDIA

Symbolized by a female figure with a veil, this personification of internal peace was worshipped at Rome as early as 367 B. C. She was invoked together with Janus, Salus, and Pax, and, by matrons, with Venus and Fortuna. In Imperial times Concordia Augusta was invoked in favor of the emperors' matrimonial happiness. I know of no identified gem representation.

FAMA

Fame, reputation, or good report, was personified as a figure with a trumpet and spear. I know of no ancient gems.

FIDES

The personification of good faith in keeping one's word or oath was represented with outstretched right hand and a

veiled head. Her attributes were wheat-ears, fruits, the turtle-dove, and, especially, two clasped hands. I know of no figure on a gem, but the clasped hands, sometimes holding a stalk of wheat between them, was a recognized device on rings signaling a marriage or betrothal. (See Pl. XXVIII, 16).

FELICITAS

This personification of good fortune, a draped female figure, bore the cornucopia and the caduceus. I know of no gem pictures.

HILARITAS

Mirth, cheerfulness, appears personified on the coins of Hadrian, with a cornucopia and a palm, and with children around her. Improbable on gems.

HONOS

The personification of honor was a youthful figure with long locks, a chaplet of bay leaves, a sceptre, and a cornucopia. I have never identified this on a gem.

VIRTUS

Warlike courage, to which Marcellus first raised a shrine in Rome and, later, Marius, was a youthful figure with long tresses and a richly ornamented helmet. Very doubtful on gems.

LIBERTAS

The personification of liberty had a temple on the Aventine. She was sculptured as a richly dressed matron, with a laurel wreath. After the death of Julius Cæsar, she was shown with a dagger and a liberty cap, a short-lived representation, though possibly preserved secretly by members of the old aristocratic faction.

PUDICITIA

The worship of modesty and chastity was a cult of patrician matrons in Rome, certainly as early as the fourth century B. C. The goddess was represented as a draped matron concealing her right hand in her garment. Later she fell out of favor for obvious reasons, but the cult was revived in Imperial times, in honor of some of the empresses. Doubtful on gems.

SALUS

As the personification of health, Salus was identified with Hygeia and represented similarly. As a deity personifying the welfare of the Roman State she had a temple on the Quirinal as early as 302 B. C., where she was probably represented in similar form. I know of no gems.

SECURITAS

The personification of security leans on a column with her hand to her head. I have seen no gems.

PIETAS

Personification of domestic affection; she had a temple in Rome at least as early as 181 B. C., vowed by Acilius Glabrio, where she was shown as a matron strewing incense on an altar. Her symbol was a stork. Doubtful on gems.

PROVIDENTIA DEORUM

The foreseeing care of the gods, as personified, has for attribute a bird of augury. It is found, I think, only on coins.

SPES

(Pl. XXV, 10; XXVIII, 21)

Spes or Hope, especially hope for the blessings of a fruitful harvest and, in later times, for a fruitful marriage, was a goddess of the future invoked at marriages and births. She had several temples in Rome and, contrary to most of these

personifications, is found on a few of our gems. A youthful female figure in a long robe which she raises slightly with her left hand, she carries in the right a bud. On one gem, instead of the typical bud, she holds a small figure of Bonus Eventus with a patera and ears of wheat.

Many of the above personifications, together with others even more vague and less familiar, were, naturally, adaptable to what might be called personal cult-phases inspired by motives of Imperial compliment. Such are Spes Augusta, Securitas Augusta, Providentia Augusti, Concordia Exercitium, Fides Cohortium, Gloria Exercitus, Gloria Sæculi, Gloria Romanorum, etc.

I have given the attributes stated above, mostly from coins or statues and a few from gems which have been satisfactorily identified, but there is no reason to believe that all of these personifications were ever conventionalized in exclusive artistic forms. An artist dealing with such a subject might well have felt at liberty to express it in any way that might seem to him satisfactory, and the student may find such representations in figures that are puzzling in their vague approach to better recognized types. In the matter of attributes, for instance, the cornucopia belongs to most of them, because the good qualities and satisfactory relations personified in such deifications were calculated to induce prosperity and plenty. Other attributes are apt to be of as easy interpretation, save in rare cases, like that of the raised robe that distinguishes Spes, the reason for which must go back to some early cult idea and a resultant type statue of which we have no record.

PENATES

These household deities of the Romans do not seem to be pictured on gems. Many of the little bronze figures of them which have been preserved show no especial distinguishing characteristics, but sometimes they were represented dancing and holding a drinking horn to symbolize prosperity.

GENII

(Pl. XXIII, 9; XXIV, 16)

According to Italian ideas, every locality and every man had its or his genius or creator. Genii of places were generally represented as serpents. The genius of the Roman People stood in the Forum, a figure of a bearded man with a diadem, cornucopia and sceptre. The genius of a person was usually clothed in a toga, with the head mantled, and bore a cornucopia and patera. We may also sometimes suspect such subjects as the genius of Mars and the genii of the various emperors which were worshipped and which appear on coins. Wings were often added to these figures, but the cornucopia and, often, the serpent were the conventional attributes. Owing to uncertainties of identifications they may appear on gems more frequently than the record shows, and figures of youths may be sometimes suspected from the context to be meant to be genii.

The planetary genii shown on Gnostic amulets were creations of quite a different kind and will be considered in their place.

Of the foreign Oriental deities, worshipped through the Roman World under the Empire, some have, from their associations, been treated already. The rest may be considered here. There were a great number of these, and new types and combinations may always be looked for. Many are very difficult to name, such as the figure covered with the skin of a fish and carrying a basket, found on a gem and probably Babylonian in origin. Combinations of Zeus and Baal evolved logically and Tychē Pantheios, Minerva Pantheia, Bacchus Pantheios and other Pantheistic combinations are found, leading up to the idea of the Abraxas god invented by Basileidēs.

Of those that are shown in conventional and readily identifiable forms, by far the most common is Harpokratēs.

HARPOKRATĒS—HORUS

(Pl. XV, 17; XXI, 11; XXIX, 20b, 26)

This Greek adaptation of the younger Egyptian Horus, son of Isis and Osiris, was, as a deity of early vegetation, sometimes identified with Priapos and even with Erōs. The Egyptians represented him as a naked boy with his finger on his mouth and, from a misunderstanding of this symbolism expressing the idea of infancy, the Greeks made their Harpokratēs the god of silence and secrecy. He is always shown with his finger to his lips, holding a cornucopia and with a lotos flower on his head to indicate his Isiac relation.

Figures of Horus, according to the Egyptian type, are common on Gnostic gems, a naked child with finger to his mouth and seated on a lotos flower or in a crescent shaped boat. Generally he carries a scourge, and various symbols and names are often added, but the identification is always easy.

Together with Horus we find on the talismans of these sects many figures taken from the Egyptian theogeny: the jackal-headed Anubis, the ass-headed Typhōn, the baboon and ibis of Thoth, and all manner of adaptations and combinations, each, often, unique and to be explained, if at all, only on its own lines (Pl. XXVI, 5; XXIX, 28a).

ISIS

(Pl. XV, 11; XXII, 9; XXIII, 18)

The worship of this Egyptian goddess of procreation and birth, the feminine principle in nature, shown in Egyptian and Phœnician art with a cow's head or horns, sometimes with the moon's orb between them, and, often, with the child, Horus, in her lap, spread to Greece and, after the Second Punic War, obtained a foothold in Rome, which it maintained in spite of strong governmental opposition. Under the Empire it was recognized and became very popular. Isis was often combined with other deities. Her attributes were the lotos, sistrum, cornucopia, serpent, wheat-ears, vase, and moon orb set between

horns. Her figure in Roman art was generally fully draped. Rarely, as a patroness of navigation (Isis Pharia), she holds a sail and, sometimes, she rides the dog Sirius.

MITHRAS OR MITHRA

(See Pl. XXIX, 19)

The figure of Mithras whose individuality, origin and cult have been discussed in our historical sketch, was conventionally represented as a youth in Persian costume and cap, plunging a sword into a bull. Raised and lowered torches were his emblems, or the rising and setting of the Sun was symbolized in some similar way. It is quite probable that he may be figured otherwise than as given above, as in acts or postures representing scenes in his mystic history, but the veil is dark and our knowledge incomplete.

ABRAXAS OR ABRASAX

(Pl. XXIX, 20a)

The conventional figure of the Abraxas Pantheios, common on Gnostic gems, has a human body clad in a corselet, a cock's head and serpents instead of legs. On one arm he bears a shield and in his hand a scourge, rarely a dart or sword and, on one gem, a mace. On a few the head is a hawk's or lion's; on one, an ass', seeking to propitiate Typhōn by the combination, and various attributes are sometimes pictured in the field, as suited to a Pantheios. The figure, however, is always unmistakable.

CHNUMIS OR CHNUBIS

(Pl. XXIX, 22, 27)

The Agathodaimōn is often figured on Gnostic gems in the form of a serpent with a lion's head surrounded by rays, generally seven or twelve.

ASTRAL POWERS OR GNOSTIC GENII

(Pl. XXIX, 24)

These representations, generally very crudely executed, are quite distinct from the genii of Roman mythology and represent the powers presiding over the different regions of the heavens and over the heavenly bodies. They are always winged, generally with two pairs of wings. Sometimes they have a bird's tail and, often, four arms. They usually hold sceptres and often the sacramental table is represented resting on their heads. The extreme roughness of much of the work on these stones makes it often difficult to determine just what is meant to be pictured.

BES—BESA

(Pl. VI, 4, 62, 8, 10, 12)

The figure of this Syro-Egyptian deity is very common on Phœnician and Carthaginian scarabs. The Egyptian type is a bandy-legged dwarf, the Syrian is more shapely. In both, however, the face has certain demonic characteristics. There are evident associations between Bes and the Greek Hēraklēs, and, more especially, with Seilēnos, so that representations are apt to run toward either of these characters. The Seilēnos type of face is usually given him, often in its most brutalized form. Usually he is shown on the scarabs fighting with an animal or animals or holding them up in his hands to symbolize his power. Specific provinces of Bes are to guard his worshippers against disease and, particularly, to aid women, to whom he ministers in childbirth and, hence, to protect children.

MONSTERS

(Pl. I, 7b, 9; II, 1; III, 1b, 9, 10; IV, 15; V, 6, 12; VI, 3; VII, 7; XIII, 22)

Turning back to the realm of Greek art, its monstrous creations, many of which are familiar to us, deserve, nevertheless, a few words. As already detailed, all manner of combinations were used for signets, nearly always with a more

or less definite idea of invoking magical influence or aid for the wearer. It will only be necessary to consider specifically here those types whose mythological origins and recognized names have made them conventional.

SPHINX

(Pl. IV, 16; V, 14; X, 18; XVII, 17; XIX, 18)

The sphinx, derived from Egypt, was represented in the earliest Greek art as a lion with a woman's head and usually winged. Later, it sometimes showed the woman's breasts, and, still later, even more of her body. A serpent's tail was occasionally added.

GRIFFIN

(Pl. II, 2, 16; III, 16; VI, 12, 17; VII, 6; X, 8; XXIX, 18)

The figure of this monster, Oriental in its origin, had the body of a lion and the wings and head of an eagle. On one very early gem it has also an eagle's tail.

KENTAUROI—CENTAURS

(Pl. V, 4; VII, 5; XVII, 3; XXV, 15)

These were beings with horses' bodies and legs but with a man's body from the waist up instead of a neck. On archaic Greek, Etruscan and Phœnician gems they are not infrequently shown as men, legs, feet and all, with the hinder half of a horse attached. Cheirōn was the best known, as the tutor of some of the most famous heroes, Asklēpios in medicine, Achilles in playing the lyre &c. Nessos, who was slain by Hēra-klēs while trying to carry away Dējaneira, is also pictured in art.

HIPPOKAMPS

(Pl. XXV, 2)

Creatures, half horse and half fish.

HARPIES

Originally storm-demons that caused men to disappear, they were, according to Hēsiod, winged maidens with flowing hair. Later they were represented as half bird, half maiden. Apparently having little magic-working power, they are probably rarely if ever found on gems and, when occurrent, would be very difficult to distinguish from some other forms, especially those of seirēns.

SEIRĒNS

(Pl. V, 5; VIII, 6; XIII, 16, 17)

These symbols of magic beauty and the power of song are common on gems. They were represented as birds with women's heads or with the upper part of a winged woman set on bird's legs.

CHIMAIRA

(Pl. III, 14; XXVII, 15)

This monster, destroyed by Bellerophōn, is represented as a lion with a goat's head springing from its back and a serpent tail.

RIVER-GODS (ACHELŌOS)

(Pl. IV, 7; X, 3; XIII, 23; XVIII, 24?; XXV, 7)

These creatures seem to have taken their conventional form of a man-headed bull from the numerous self-transformations of which Achelōos, god of the river that ran between Ætolia and Akarnania, was capable and to which he resorted in his combat with Hēraklēs. Through Sicily and the Greek cities of Southern Italy, river-god cults were especially popular. They are also represented as male heads with bull's horns.

PĒGASOS

(Pl. III, 11; XIX, 18; XXVI, 11)

The winged horse, born of Poseidōn and Medousa. Ac-

according to the Alexandrian poets, the Hippokrēne spring on Mt. Helikōn, which inspired to poesy, rose from a blow of his hoof.

KERBEROS—CERBERUS

(Pl. V, 9; XXVII, 17)

The three-headed watch-dog of the Under-world.

EARTH-GIANTS

(Pl. XII, 21; XXII, 11; XXIII, 13)

On early Greek and Etruscan gems, these are usually represented as nude, wild looking warriors hurling huge rocks, though, even then, we sometimes find the serpent-legs which characterize them in later times. Rarely they have wings. They are often shown being conquered by some god.

CHAPTER III

HEROES AND THEIR ATTRIBUTES

OF the various heroes of the epic cycles shown on gems, some are difficult or impossible to identify. It is not always a thing to be positively stated whether a picture of some warrior without any distinguishing characteristic is meant for a specific personage, but, in such cases, the original meaning counts for little and, to all our intents and purposes, the work is simply an artistic conception of daily life.

Greater responsibility and much greater interest attaches to certain figures which, from their special attributes and attitudes, as well as from the similarity of repeated types, are evidently meant for definite personalities but which seem to carry no clear means of attribution. Such is the kneeling figure of the warrior found on many early Italian gems and concerning which Dr. Furtwängler hazards the guesses of Marcus Curtius and Decius Mus (Pl. XVII, 8). Neither seems to me at all satisfying. Surely if it were the former, the horse would be shown or some suggestion of the plunge or the fabled chasm would be introduced, as they are in other gem pictures. As for the latter, while pictures of historic individuals and occurrences are rare they are not unknown on Roman gems, but any representation of the martyr-consul would surely bear a suggestion of the peculiar feature of his sacrifice; the cincture Gabinus. These figures must still be placed in a class where others undoubtedly fall; heroes of some one of the many poems of antiquity lost, perhaps, forever, possibly to be discovered by some fortunate antiquarian or archæologist.

On many Etruscan scarabs all difficulties, save those in-

volved in Etruscan epigraphy and their torturing of Greek names, are fully solved by the habit of placing in the field of the gem the name of the hero represented, but such inscriptions have not infrequently been added on ancient scarabs by modern forgers, and the Etruscan had a disturbing habit of naming, quite arbitrarily, entirely impersonal figures.

Known Etruscan forms of Greek heroic names, bearing in mind the fact that they read more often from right to left in the impression, are

for Hēraklēs—Ercle or Hercle	Achilleus—Achale, Achele,
Kastōr—Castur	Achile or Achle
Polydeukēs (Pollux)—Pul- tuke	Odysseus—Ulusse, Ulxe (or Utuse?)
Tydeus—Tute	Aias (Ajax)—Ainas or with a digamma for the N
Amphiaraios—Amphitiare	Thēseus—These
Polyneikēs—Phulnice	Perseus—Pherse
Adrastos—Atresthe	Pēleus—Pele
Parthenopaios—Parthana- paes	Klytaimnēstra—Klutumus- thra
Ixiōn—Ichsiun	Kyknos—Kukne
Orestēs—Uruzthe	Kapaneus—Kapne
Agamemnōn—Akhmiem	
Aktaiōn—Ataiun	

Of the heroes more or less popular on gems, first and foremost in overwhelming preponderance is

HĒRAKLĒS—HERCULES

(Pl. III, 9; IV, 7, 25; V, 3, 10, 20, 24; VII, 13; IX, 9; X, 17; XI, 6, 21;
XII, 4, 5, 12, 23?; XIII, 2, 5, 9?, 12, 13; XV, 18; XVIII, 1;
XX, 1, 7; XXII, 13; XXV, 7, 19; XXVII, 11, 17)

Greatest of all the hero-creations of Greek fable is Hēra-klēs. Always a figure pre-eminently muscular and powerful, in early art he is often unbearded, in later, more frequently the reverse. His typical attributes are the bow, club and lion's skin, the last two dating from Peisander of Rhodes, in the

latter half of the seventh century B. C., who also fixed the number of the "Labors" at twelve, perhaps in imitation of the contests of Melkart, the Phœnician Hēraklēs, with the twelve beasts of the Zodiac. The Carthaginians saw in him this national deity and, somewhat Phœnicianized, he was a popular figure on their scarabs. As a child he was sometimes shown strangling serpents and, in Etruscan art, an amphora is often pictured with him. He is also found bringing water from a spring, catching it in his lion-skin or sailing on a raft buoyed up by amphoras. Certainly in Italian mythology he had, together with Seilēnos, some control over springs and water, especially hot springs, and the legends of his voyage across the sea in the bowl of the Sun may be indicated on certain scarabs. Drunkenness, too, seems to be associated with him and he is often shown holding a wine cup. The wild olive and white poplar were his sacred trees, the cornucopia was sometimes given him as to a luck-bringing personage, and wild boars were his sacrificial animals. In Rome he was worshipped as Mousagetēs (Master of the Muses) and on late gems he is occasionally shown playing a lyre. In early Italian cults he seems to have been connected in some more or less vague way with the shepherd hero, Garanus, the Italian conqueror of Cacus, and with the deity, Sancus or Dius Fidius.

Many of the "Labors" are popular on gems, the first perhaps most so. Given in order they are:

- 1st: The conquest of the Nemean lion.
- 2nd: The conquest of the Lernian hydra or water dragon (Not infrequent).
- 3rd: The conquest of the Erymanthian boar (Rare).
- 4th: The capture of the Kyrneian hind (I have not seen this on gems save on a cameo in the Berlin Museum).
- 5th: The chase of the Stympthalian birds. He is thus represented shooting at them with his bow.
- 6th: The gaining of the girdle of Hippolytē, Queen of the Amazons (I have not found it on gems).
- 7th: The cleaning of the Augeian stables (I have not

found it on gems and the subject is an improbable one).

- 8th: The capture of the Marathōn bull, afterward slain by Thēseus. Hēraklēs is pictured carrying a bull on his shoulders.
- 9th: The capture of the man-eating horses of Diomēdēs. Probably shown on several gems, on one of which horses seem to be eating a man. Diomēdēs was thrown by Hēraklēs to his own man-eating steeds.
- 10th: The quest of the oxen of Geryōn. (Not pictured that I know of, though many adventures were included in this labor, especially the voyage in the Sun-bowl).
- 11th: The quest of the apples of the Hesperides. He is thus sometimes shown holding an apple or a bough or slaying the guardian dragon.
- 12th: The bringing of Cerberus from the Under-world. (Not rare on gems).

Other exploits of Hēraklēs found in gem pictures are the killing of Kyknos and of Antaios (Hēraklēs is shown wrestling with the latter and lifting him from the ground), also his fight with the river god, Achelōos, usually in the guise of a contest with a man-headed bull. His apotheosis is found on one Etruscan scarab, and on another he is seated on his funeral pyre.

Still further adventures may be found, perhaps some drawn from lost poems. An Etruscan scarab in the collection of W. Gedney Beatty (Pl. XII, 4) is a veritable puzzle in the field of Hēraklēs myths.

Omphalē, whom Hēraklēs was compelled to serve, is shown on a series of beautiful gems as a charming female figure, nude, save for the lion's skin, and bearing the hero's club. (See the Renaissance copy, Pl. XXX, 13). He, on the other hand, has been pictured in art with the distaff of the Lydian queen, but I have never seen the subject on an ancient gem and I doubt its occurrence, as not being in accord with the popular line of Hēraklēs representations.

ANTAIOS

(Pl. XXV, 19)

Shown only in pictures of his being strangled by Hēraklēs.

KYKNOS

(Pl. XI, 6)

Shown only in pictures of his being slain by Hēraklēs.

DIOSKOROI

(Pl. VIII, 2; XXIX, 1)

Kastōr and Polydeukēs (Pollux). Heroes of the young athletes and warriors, and guardians of seamen, the twins were honored from an early date at Sparta, Olympia, Athens, and many other places in Greece, as well as throughout Italy, and, especially, at Rome, Ostia and Tusculum. They are represented as youths, usually with oval helmets and spears, while two stars, either on the helmets or in the field of the gem, symbolize their place in the heavens as the constellation, Gemini. Often their horses, Xanthos and Kullaros, are shown with them. A picture of the death of Kastōr, on an Etruscan scarab, is only identifiable by the inscription (Pl. XII, 11).

Their ancient symbol at Sparta was two parallel beams joined by cross pieces, and their sea-sign was a flame on the masthead.

THĒSEUS

(Pl. XI, 11; XII, 23?; XX, 14)

An athletic figure, but slighter than Hēraklēs, beardless, sometimes in a chlamys and petasos, sometimes a lion's skin, but more frequently nude. The sword is definitely an early attribute, from the story of his lifting the rock to obtain his father's shoes and sword. Therefore this act, too, often appears in his pictures. More especially on later gems the club

is his weapon and, often, he has both sword and club. His conquest of the Minōtaur or bull-headed man was a popular subject.

PERSEUS

(Pl. XI, 14; XII, 9)

A common figure on gems, often shown killing Medousa or holding the head in his hand. Other attributes are the sickle-shaped sword, the winged sandals of Hermēs, and the helmet of Hadēs, usually pictured with the wings and head of a bird.

AKTAIŌN

(Pl. XII, 20; XXIV, 18)

Shown either as a man attacked by dogs or, sometimes, as peering over a rock at Artemis and with the stag's horns already sprouting from his head. These representations of his crime and its punishment date only from Hellenistic times. In early Etruscan art, for instance, he is pictured as a hunter with his dog.

ORPHEUS

A rarer subject than those above described, in earlier art he appears wearing a long robe, though his Hellenic character is preserved. Later, he became Orientalized and was given the Phrygian garb. His attribute is the lyre.

MELEAGROS—MELEAGER

Shown as hunter, often with a dog and with the Kalydonian boar's head as his attribute.

BELLEROPHŌN

(Pl. XXVII, 15)

A warrior mounted on the winged horse, Pēgasos, and, usually, attacking the Chimaira.

DANAĒ

(Pl. VIII, 12)

Pictured as a maiden receiving the shower of gold in which Zeus descended on her. The falling gold is not always specifically shown, but she expresses the idea by her upward look or by holding out her robe as if to catch the blessing of the divine favor.

ATALANTĒ

Also rare. She has no specific attribute, though we might expect the Kalydonian boar's head and skin, from the Arkadian legend or, from the Bœotian, the golden apple she stopped to pick up in the race with Hippomenēs.

HYAKINTHOS—HYACINTHUS

(Pl. X, 15d?; XII, 18)

Shown on one Etruscan scarab, as a youth bending over a discus, with blood dropping from his head.

ORESTĒS

(Pl. XVII, 23?)

No especial attribute. On one gem he is pictured a prisoner before Iphigeneia at the shrine of the Tauric Artemis. He may be shown slaying a woman (Klytaimnēstra), where a Fury is introduced in the scene to indicate that it is a murder rather than a sacrifice. He might, also, be shown pursued by the Furies, together with Pyladēs or, with Ēlektra, at the tomb of Agamemnōn.

KLYTAIMNĒSTRA AND ĒLEKTRA

As above.

JASŌN

Usually represented beside the prow of a ship and, on one

gem, together with Mēdeia, taking the golden fleece from the tree.

MĒDEIA

Shown with a child or children.

ARGOS

(Pl. XVII, 16)

Shown building the ship, Argō.

IKAROS AND DAIDALOS

(Pl. XIII, 14?)

The former is pictured on one gem receiving one of the wings just fashioned by his father, Daidalos, or, again, as a youth equipped with wings. Daidalos is shown in the same pictures as an old man, sometimes as a smaller figure, possibly to suggest the idea of a magic working gnome.

TANTALOS

(Pl. XII, 17)

Rare. Probably shown on two Etruscan scarabs as a man bending over flowing water or an amphora as if to drink. The inscription on one of these has been read, "Taitle."

IXIŌN

(Pl. XII, 16)

Rare. I know of one gem, an Etruscan scarab, which represents him bound to his wheel.

KADMOS

(Pl. X, 12; XII, 22)

Shown as a warrior contending with a serpent and rather common on Etruscan scarabs, or with an amphora at the spring.

LĒDA

(Pl. XIX, 13?)

Pictured as a nude figure with Zeus in the form of a swan and not rare on ancient gems. The more pornographic representations which we find quite commonly are generally works of the eighteenth and nineteenth centuries.

PASIPHAĒ

She may be pictured rarely. One gem showing a half draped woman beside a cow or bull has been thus identified speculatively.

PROMĒTHEUS

(Pl. III, 17a; XVII, 14)

Not an unusual subject on gems, he is pictured from early times bound to the rock, usually with the eagle preying on his liver. Also he appears on a series of gems as a magician at work on the figure of a man.

OIDIPOUS—ŒDIPUS

(Pl. XVII, 17)

Pictured not uncommonly either propounding his riddle to the Sphinx or killing her.

TITYOS

(Pl. IV, 2)

He is shown on Etruscan scarabs pierced by the arrow of Apollō. I know of no gem which shows him being preyed upon by the *two* vultures of the fable, the only sure means of distinguishing such a representation from that of Promētheus.

ORTHRYADĒS

(Pl. XVII, 5)

His is the not uncommon picture of a dying hero writing on a shield to proclaim the Spartan victory over the Argives at Thyrea.

ACHILLEUS

(Pl. XI, 4, 7, 8?, 15, 17?; XIII, 20, 24; XVII, 3, 13; XX, 15; XXV, 14)

One of the most widely pictured types of the Trojan War cycle, he is to be distinguished on gems only as he appears in some one of the scenes from his life. He is shown beardless, with his arms beside him, meditating in his tent or receiving the new arms brought him by Thetis. Also he appears playing a lyre or, as a boy, being taught to play on it by the centaur, Cheirōn. Sometimes he is supporting the dying Amazon queen, Penthesileia, and he is also found in his chariot with the body of Hektōr dragged behind. Priamos, too, is occasionally shown kneeling before him and begging for the surrender of Hektōr's body. Lastly, on a number of gems, he appears with his heel pierced by the arrow of Paris which is to cause his death. Undoubtedly other hero-pictures show him where, however, the accuracy of the attribution begins to be more or less doubtful.

THETIS

Probably shown on early gems mounted on a sea monster. Later and rarely, she is pictured bringing the arms made by Hēphaistos for her son, Achilleus.

PRIAMOS—PRIAM

Shown usually as an old man, a suppliant before Achilleus; occasionally, in the scene of his death at the hands of Neoptolemos and, on one gem, with Hermēs, bringing home the body of Hektōr.

PENTHESILEIA

(Pl. XI, 15)

Shown as the Amazon queen overcome by Achilleus. Her attribute is the double ax of the Amazons. The Amazon shield, variedly crescent shaped, does not appear on early gems I have seen but might readily be found on late examples.

HEKTŌR

Identifiable in pictures representing his parting from Andromachē and the infant Astyanax, also as dead and drawn behind the chariot of Achilleus or being brought back to Troy by Priamos and Hermēs.

ANDROMACHĒ

Only with Hektōr as above.

PHILOKTĒTĒS

(Pl. IX, 1; XIII, 21; XXV, 17)

A very popular gem subject. Usually the bow and arrows of Hēraklēs and the serpent that stung his foot serve to identify him and he is often shown on the island of Lemnos, either nursing his wounded foot, fanning the flies from it with a bird's wing or limping with the aid of a staff. In certain group pictures the warrior holding out his foot to be treated by Machaōn is, doubtless, he.

MACHAŌN

(Pl. XXV, 17)

The surgeon of the Greeks before Troy is pictured not very commonly, usually treating the foot of Philoktētēs or, perhaps, in scenes where a warrior seems to be taking care of a wounded comrade.

ODYSSEUS—ULYSSES

(Pl. IX, 7; XIV, 10; XVIII, 2; XXV, 8)

One of the most popular of the hero types, as the embodiment of diplomacy and cunning. He is shown bearded, either with the semi-oval cap of a sailor and often a staff and being recognized by the dog, Argos, or as a warrior, aiding Diomēdēs to steal the Palladium or, again, in either character, seated and pondering over some plan. Other pictures are less certain, though on one gem he seems to be slaying Dolōn, on another offering a wine cup, presumably to Polyphēmos, on a third ploughing, while Palamēdēs lays his child before him in the furrow, and on a fourth inspecting the arms of Achilleus which were awarded him after that hero's death. On Etruscan scarabs he is found with the sack of Aiolos or, sometimes, sacrificing a ram, preparatory to his descent into the Under-world.

DIOMĒDĒS

(Pl. XX, 5; XXV, 17) (Pl. IV, 5)

Also a popular figure, though not to the same extent. Usually shown as a beardless warrior with the Palladium, often in company with Odysseus. Once he is pictured with Athēna in his chariot, and the third warrior in the Machaōn-Philoktētēs scenes is doubtless he, since he went to Lemnos to bring the wounded hero to Troy that the magic arrows might effect its capture. In the fighting and camp scenes his identity can only be guessed. He may be shown, according to Furtwängler, as a hero drawing an arrow from his foot, as indication of his surviving the wound, unlike Achilleus.

Diomēdēs, son of Arēs and Kyrēnē, is pictured being devoured by his man-eating horses to whom Hēraklēs threw him.

AGAMEMNŌN

Either rare or of doubtful identification on gems.

MENELAOS

(Pl. V, 8)

The same comment may be made, except where he is carrying the naked corpse of Patroklos.

AIAS—AJAX

(Pl. XI, 7; XII, 15; XVII, 13, 24?; XXV, 1, 20)

Again a rather popular figure. A bearded warrior, he is generally pictured carrying the body of Achilleus, defending that of Patroklos, tearing Kassandra from the statue of Athēna, looking at the arms of Achilleus, seated by the head of an animal he has torn to pieces in his madness, slaying himself, and, perhaps, in other scenes from the Iliad.

PATROKLOS

(Pl. V, 8; XI, 8?, 17?)

Shown as a fallen hero with the battle raging over him, or as a naked corpse on the shoulders of Menelaos; also, on one gem, as being halted by Apollō before the gate of Troy. His borrowing the arms of Achilleus may be the subject of one gem, and his parting from him, of another.

NEOPTOLEMOS

Not very common. Usually shown sacrificing Polyxenē or killing the aged Priam.

POLYXENĒ

Rather rare. Shown as above.

KASSANDRA

(Pl. XVI, 5?; XVIII, 4; XXV, 20)

Much more common. Shown sitting before the Palladium, embracing it for protection or being torn away by Aias.

There is also a series of female heads which, either from the thoughtful expression, the olive wreath or the serpent in the field, are supposed to be that of the Trojan prophetess.

PARIS

(Pl. XI, 5?; XII, 14)

Not infrequent. Usually pictured as a beautiful youth in a Phrygian cap. On Etruscan scarabs he is shown bending his bow or drawing an arrow from his quiver. His judgment of the rival beauties of the three goddesses occurs on two gems, Hermēs also being present. It may be well to remember that this is pre-eminently the kind of picture that would be popular with modern imitators.

LAOKOÖN

(Pl. XVII, 6)

Rare. Shown with his two sons attacked by the serpents. Also frequent in modern work.

AINEIAS—ÆNEAS

Shown carrying Anchisēs from the sack of Troy and, usually, with the boy Askanios beside him.

ANCHISĒS AND ASKANIOS

As above.

KAPANEUS

(Pl. XI, 9, 20; XVII, 4)

By far the commonest of the heroes of the Theban cycle, especially on Etruscan and early Roman gems. He is seen stricken by the thunderbolt, often falling from the ladder by which he has sought to mount the wall, and, also, bearing away half a gate.

ETEOKLĒS AND POLYNEIKĒS

(Pl. XI, 13)

Rare and only identifiable when pictured killing each other or when named.

TYDEUS

(Pl. XI, 12, 13; XII, 3)

Not rare on scarabs but practically unidentifiable except when his name is added.

AMPHIARIOS, ADRASTOS AND PARTHENOPIAOS

(Pl. XI, 13)

These heroes, also, can only be identified when named.

ROMULUS AND REMUS

(Pl. XXV, 3)

Of Roman hero types, these only can be identified as at all common. They are shown as infants being suckled by the she-wolf. Often the shepherd, Faustulus, stands near, and Roma or Mars may also be added to the picture. There are many forgeries of the she-wolf and the twins alone, and the gems where her head is not turned toward them are all almost surely false, since these are generally copied from the group in the Capitol to which the twins were added in modern times.

FAUSTULUS

(Pl. XXV, 3)

Shown as a shepherd as above.

VIRBIUS (OR DIANUS)

(Pl. XVII, 9)

The first Rex Nemorensis, or, perhaps, the early male

counterpart of the Diana Nemorensis, is probably pictured on several early Roman gems which show a man with a stag or preparing to sacrifice it.

HORATII

The three Horatii may be pictured on certain early Roman gems as three heroes armed in Italian fashion, but they have not been surely identified.

MARCUS CURTIUS

(Pl. XVIII, 3)

Shown as a warrior falling from a horse that seems to be stumbling or plunging forward, as if into the Curtian chasm.

MUCIUS SCÆVOLA

Common enough on forged gems. I have, however, seen one picture of a Roman hero thrusting his hand into an altar flame which seems to me genuine. Though the Roman heroic types are, doubtless, like historical subjects, very rare, this would certainly be the most natural signet device for one of the Mucian gens who were numerous and prominent in Roman history.

It is probable that other heroes are occasionally pictured, but I think I have given those that are at all common or that we can hope to identify.

AMAZONS

These may also be included under this head. They are shown as female warriors contending with Greeks. Where attributes occur they are the double ax or the Amazon shield, either crescent shaped or like Fig. 28. Empresses and mistresses of emperors were sometimes pictured as Amazons on late gems.



Fig. 28.

PART III

**TECHNIQUE—MATERIALS—HISTORICAL AND
MYTHOLOGICAL SIGNETS**

CHAPTER I

TOOLS AND TECHNICAL METHODS OF GEM ENGRAVING

WHAT is, perhaps, the earliest notice of the method of cutting intaglio designs in stone is found in Herodotus (VII, 69), who writes of the arrows of the Ethiopians as being "Tipped with a stone made sharp and with which (or thus) they engrave their seals." This has been construed by King and others as meaning that the intaglios were scratched in with the point of the arrow, but the translation is rather uncertain in view of the fact that the Greek admits of both the readings given above. We know, however, that many stones were cut with signet devices by having the pictures scratched into them by a sharp point of some harder substance held in the hand of the engraver. In Minoan and Mycenæan times the softer materials were generally engraved in this way, and the signets of the Greek Middle Ages and the Melian "Island stones" of the budding revival are, for the most part, examples of such workmanship.

With the discovery and adaptation of harder materials in more civilized communities, the possibilities of such an instrument were greatly increased, and we find it referred to as "adamas" in Jeremiah, XVII. Adamas has come to be loosely translated, diamond, and the corresponding tool of modern times is called the diamond-point, a sharp splinter of that gem set in a handle. Etymologically, however, the term, *adamas*, meant merely a superlatively hard substance, and it is more than doubtful if the true diamond was known to the ancients. The consensus of the best opinions is that the *adamas*, of which Pliny says there were six kinds, was a variety of corundum, probably our white sapphire.

On the harder gems; sard, carnelian, chalcedony, jasper, etc., this early method of scratching in designs was laborious and ineffective. Even on the softer stones it is not co-incident with fine work, and, with the revival of art and the perfection of wheel-technique to be described later, it is probable that the point was seldom used on stones as hard as quartz. King and many writers of the last century hold the contrary of this and exaggerate the importance of indications of "diamond-point" work as being one of the best evidences of antiquity, but, considering all the signs and arguments, it does not seem probable that much use of this tool was made in engraving the harder gem substances before Græco-Roman times, and hardly any before those of Alexander. Then it was undoubtedly employed, occasionally, as a finishing instrument for minute details and fine, sharp lines.

It was Natter who, in the early part of the eighteenth century, announced the then current opinion that "The extensive use of the diamond-point is the grand distinction between the antique and the modern art"; and Sirletti, who died at Rome in 1737, had already employed that instrument at the suggestion, says Gori, of Baron Stosch and, doubtless, with an eye to establishing the genuineness of his forgeries. Diamond-point work soon became the desiderata of the collectors, and the engravers naturally did their best to meet the demand.

Along with the scratched-in work on soft stones, there is also evidence on such gems, both in early and late times, of the use of a rotating drill, also, probably, held in the hand. Large depressions were thus sunk in the stone, to be finished off with pointed instruments, but whether these hand-drills were tipped with stone or metal is a matter of conjecture as, also, whether any hard powder was used as a cutting medium, though in the periods when such a material was known and utilized in the wheel-work on hard gems it would be remarkable if its efficacy were ignored in any case where it would be an aid.

This brings us to the overwhelmingly prevalent method of gem-engraving, not only employed on the best work of the best

period but also on the hard quartzes of the Minoan age and, down to the present time, whenever and wherever intaglio gems have been cut in such material. This is the use of metal drills, generally with more or less rounded heads, tubular drills, and disks, all of which are caused to revolve rapidly by means of some rotating mechanism and which cut into the stone, not by means of their own hardness, for they are comparatively soft metal, but by rubbing in a medium composed of some kind of powdered emery mixed with oil which grinds out the hardest quartz with remarkable rapidity. The circular disks of different sizes and fineness, governed by such a rotating mechanism, have given the name of wheel-engraving to this kind of work, and the best opinions of today attribute to it the possibility of a delicacy of line for which to King and his fore-writers the diamond point had seemed an absolute requisite. Furtwängler maintains that even the finest lines of Dexamenos are executed by this instrument and points out, as the means of recognizing its agency, that the ends of these are never sharp but always somewhat rounded, a feature which imparts to the picture a softness and delicacy foreign to the effect of the sharp lines of the diamond-point, so often used by the Græco-Roman gem-engravers in finishing their work, at a time when contrasts in technique on the same gem were considered good art. The tubular drill was probably used to cut circles and certain curves.

The powder employed for the cutting by the early artists, whose instruments were of soft metal, like ours, came originally from the island of Naxos and was a kind of emery containing some iron, which is still imported from the same place for similar uses. Pliny states (XXXVI, 10) that the use of Naxian stone was superseded in later times by that of a similar substance found in Armenia.

With the drills or disks of different sizes, then, the larger depressions were sunk in the stone, overlapping where necessary, and the finishing was done with the fine disks, though in the class of late Etruscan gems which I have referred to as drill-work scarabs there is little or no evidence of wheel-

work, and the whole design seems to have been wrought by a combination of drilled out depressions. Today the different wheel-disks seem to suffice for the greater part of the work, and the drill proper is little used. It is probable that in early times, and we know that in Hellenistic, some sort of more or less sketchy design was first scratched in with the diamond-point on the polished stone, to be, of course, obliterated in the finished work. The custom now is to make the preliminary outline sketch on, not in, the stone with a copper, brass or silver point, the polish being first slightly dulled, or, again, the surface is sometimes covered with a wash and the sketch drawn with an ordinary pencil.

As for the mechanism by which the drill and wheel were made to revolve we have little definite evidence. Today it is done by a foot or electric motor lathe, the tools, as needed, being set firmly in the mandril. The gem, fixed in a sort of handle, is held against the cutting edge and moved as the work requires, while the rapidly whirling tool rubs the oil and emery into the stone, biting away its substance until the picture takes shape. This lathe, of course, has the advantage of leaving both the workman's hands free.

What the ancients used instead of the inventions of modern times, we are unable to picture clearly, though we know they had some form of mechanism for the rapid turning of drill and wheel. The writers do not aid us and our single basis of information is the funeral stone of a gem-cutter which was found at Philadelphia in Asia Minor. It dates from the time of the Empire and shows a contrivance (Fig. 29) which

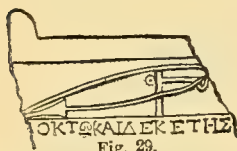


Fig. 29.

suggests the bow used in metal work by jewelers today. This instrument, drawn quickly back and forth, with the string looped about a spindle holding the tool, imparts to the latter the necessary rotary motion. Whether the gem or the mandril was stationary in the ancient work we do not know. Furtwängler suggests that they applied their tools to the stone held firmly in place, instead of pressing the latter against the tool, and he also

says that, while with a hand-bow they would be at the seeming disadvantage of not having both hands free as do our workmen, their control might be better for some purposes. I see no reason for such assumptions. Modern jewelers hold their work against the tool revolving in a stationary spindle looped in the bow, and it is difficult to conceive of sufficient steadiness in a tool held in the hand and worked by such a mechanism. Moreover, with a stationary spindle the bow might easily be manipulated by an assistant and the artist still have both hands free for the gem. There are features, too, in the above picture from the grave-stela, incomplete as it probably is, that imply some modification of the bow mechanism. Possibly it represents an improvement on a hand-bow of earlier times, but the question is one that sends us to the field of conjecture and, after all, its solution would mean nothing in the study of the work. For that it is enough to know that the cutting was done by revolving tools.

Another not especially important matter upon which more or less theorizing has been indulged in is whether a lens was used by the ancient artist. As a necessity it ranks much lower in such minute work than might at first thought appear. I have seen gem-cutters use it, but only to examine impressions of an intaglio, taken from time to time as the cutting progressed. Touch seems to be the sense upon which they chiefly rely, and it is easy to conceive of such perfection of touch in an artist as would make each unseen stroke as certain as those of the sculptor of a colossal statue. Naturally it is impossible, in any event, for the eye to guide the progress of an engraving obscured as it is by a smear of oil and powdered emery. Moreover, it is a matter of conjecture whether the ancients had such a knowledge of the lens as would enable them to apply it effectively to work of this character.

Granting first rate eyesight and an educated sense of touch, we need not wonder at any degree of excellence in an intaglio. Analogies are not lacking that show the perfection to which aptness and training can bring the senses, until all achievement lies well within the bounds of possibility. Inci-

dentally, it is told of Pistrucci that, until his death at seventy-three years of age, he never had to use glasses for his work.

After the completion of the engraving, its polishing was next in order. The surface and, usually, the back of the stone seem to have been polished before the engraving was done, since, otherwise, the preliminary sketch could hardly be effective and, moreover, much polishing of the surface after the engraving was completed would tend to mar its outlines, as we often see in the case of repolished gems. Modern engravers who dull the polish before drawing their sketch, have only to restore it with moistened rotten stone which does not seem to fray the lines as does, often, the attempt to repolish a stone in the ancient style. This ancient polish was effected by rubbing it back and forth on a polishing surface covered with finely ground Naxian powder: a process which produced a more or less wavy effect of which I have already spoken in my Introduction as the hog-back polish. The absolutely even, looking-glass polish found on most modern gems could not be got by the ancient method.

For the polishing of the interior of the intaglio we can only speculate as to the means employed. Lead pointed tools and even quills have been used in modern times to rub the diamond powder over both the large and small intaglio surfaces. This operation is merely a matter of industry, for, though the polishing of minute interior surfaces means a good deal of labor, many modern intaglios have received a polish seldom attempted by the ancients, save only the diligent Etruscans through all their later periods and the artists of Græco-Roman times.

As to the presence, absence, degree and distribution of interior polish in different periods and places, these have been described, I trust with sufficient fulness, under the appropriate headings.

CHAPTER II

THE STONES USED FOR ANCIENT INTAGLIOS

THE stones used by the ancient engravers we, of course, have, but it is often difficult or conjectural to identify them with their ancient names. Part of this difficulty is due to the fact that their mineralogical composition was unknown to the Greeks and Romans who distinguished the species on a basis of their appearance alone and, largely, according to their colors. Thus we find the same name applied to several materials of very different character and, conversely, different names given to mere color varieties of the same gem.

Always, too, we must bear in mind that, from the standpoint of the maker and wearer of talisman or amulet, the substance was often quite as important to the end as was the device.

To consider, now, the kinds of stones *not* used for ancient intaglios, we may, of course, begin by eliminating those not found in or within trading distance of the homes of the work. Secondly, we may eliminate the diamond. We do not know just when the ancients became acquainted with it but we do know that it was never engraved by them. As for the ruby, whether Oriental, spinel or balas, the ancient intaglios found on it are so superlatively few and far between and, generally, so open to suspicion that it is pretty safe to deny the antiquity of any picture cut in such material. The sapphire is almost in the same category, but it was rarely used in Græco-Roman and later times. Whether it was the "cyanus," "sapirus," "hyacinthus" or "beryllus aëroides" of Pliny is a question about which opinions have varied and on which no satisfactory conclusion has been reached.

The emerald is nearly as rare among ancient intaglios

as is the sapphire, and we are still in the class of materials which may be described as extra hazardous. It was called "smaragdus," a name which it shared with several other green stones, all powerful in their magic influences.

The cymophane or cat's-eye chrysoberyl and the opal were never used.

CARNELIAN OR SARD.—Coming now to the stones most in use, it would be pretty safe to say that at least forty-nine fiftieths of ancient intaglios are on different varieties of quartz and, among these, again, by far the commonest are the carnelians or sards. These names have been so loosely and variously used by different authors as to leave the subject in very much of a tangle.

Pliny writes: "The most esteemed kind is that of the vicinity of Babylon . . . , though it is to be found in numerous other localities, Paros and Assos, for example. In India there are three varieties of this stone: the red sard, the one known as 'pionia' from its thickness, and a third kind beneath which they place a ground of silver tinsel. The Indian stones are transparent, those of Arabia being more opaque. There are some found, also, in the vicinity of Leukas in Epeiros, and in Egypt, which have a ground placed beneath them of leaf gold. . . . Among the ancients there was no precious stone in more common use than this. . . . Those stones which are like honey in color are generally disapproved of and, still more, when they have the complexion of earthenware." Such preferences, of course, varied at different periods. All were called sards, the deep reds and brownish being considered male stones, the lighter, female. The brilliant red "Babylonian stones," coming from the East, were believed to make the wearer brave in battle and to be a protection against and a remedy for wounds.

In England the term, carnelian, seems to be commonly used for the more opaque varieties, generally of a dull red color. This is the stone found in Italian streams, also in Egypt, and many scarabs, both Etruscan and Egyptian, are fashioned in it. The English "sards" are the more translucent stones,

but some writers adopt either name exclusively or both interchangeably.

The sardoine of the French is the dark red, translucent, sometimes even transparent stone, often verging into so dark a brown as to be almost black except when held up to the light, and it is this that Dr. Furtwängler calls the brown sard. With him all the lighter shades, whether translucent or opaque, are carnelians, running down through the lighter reds into a clear yellow. Often they are streaked or variegated like agate. I have followed Furtwängler's nomenclature, though it is not always easy to fix where the "carnelian" ends and the "brown sard" begins.

CHALCEDONY.—Also a quartz and very common, especially at certain periods, this stone is generally half transparent or translucent, though sometimes opaque. Sometimes it is a more or less milky white ranging into various shades of gray or into yellowish, brownish or bluish tints. The brown and yellow shades run into the sard which, in composition, is really a yellow, red or brown chalcedony. The bluish gray, so especially affected by the Persians that there must have been some underlying belief in its magic powers, is called by the French, saphirine. We do not know the ancient name for this stone. Perhaps it was the "leucachetes" of Pliny, though he hardly gives the consideration to that gem which one would expect him to give to so widely popular a material. More probably his "leucachates" was merely the opaque white variety. Both Furtwängler and King incline to identify it with the ancient "jaspis" which seems to me misleading, since what we call chalcedony is primarily a whitish stone with various shadings, and the greenish tints which Pliny's "jaspis" had, have given a distinct name to certain green quartzes which may, much more justly, be identified with it.

PLASMA.—The "jaspis" of Pliny seems to me to be identical with our plasma, a quartz ranging from the almost transparent to translucent and often so muddy and impure as to be practically opaque. Its color runs from greenish white through yellowish green up to the darkest green tints. Often

the greenish and yellowish shadings are uneven and give the effect of clouding or even mottling. It was very popular in the early Empire. Of course it had magic power and in later times, engraved with the Chnumis Agathodaimōn, it was reputed a cure for diseases of the chest and stomach.

CHRYSOPRASE.—Chrysoprase, the ancient “chrysoprasus,” is merely the name given to the clear apple or leek green varieties of plasma, often ranging into golden tints. Pliny speaks of it as a kind of “prasius,” a name which also includes several special types of banded or spotted green stones.

JASPER.—The practically opaque colored quartzes which we call jasper were very common gem stones. The range of colors and of their combinations is wide and, doubtless, each had its name, though we can but guess at a few of them. Our green jasper may have been included under the name, “jaspis,” though it is hardly probable. The red jasper was very popular from Augustan times down, varying in shades from a dull brownish red through blood red into a bright, beautiful vermilion capable of receiving a fine polish. It seems probable that it was known anciently as “hæmatitis,” of which Pliny says: “It is a stone of blood red color, and we must not omit to mention the assurance given that the possession of it reveals treacherous designs on the part of the barbarians. Zachalias of Babylon, in the books which he dedicated to King Mithridatēs, attributing the destinies of man to certain properties innate in precious stones, is not content with vaunting the merits of this stone as curative of diseases of the eyes and liver, but recommends it also as insuring success to petitions addressed to kings. He also makes it play its part in law-suits and judgments, and even goes so far as to say that it is highly beneficial to be rubbed with it on the field of battle.” Yellow jasper, as to the old name of which we are without any good evidence, came into use only in the later Empire. Also there is white jasper, practically the same as white agate or opaque white chalcedony, and various shades of brown ranging into black. Of course there were many jaspers of mingled colors, including a red with white mottlings, used

in Mycenæan times, the red and yellow, popular with Dexamenos and his contemporaries in the best Greek period, and a green and brown used in the late Empire.

BLOODSTONE.—One of these mixed jaspers, quite popular in late Imperial and also modern times, has with us the separate name of bloodstone and is identical with the ancient “*heliotropium*”; a green jasper, sometimes slightly translucent at the edges and spotted with red. Pliny writes of it: “In the use of this stone, also, we have a most glaring illustration of the impudent effrontery of the adepts in magic, for they say that, if it is combined with the plant, *heliotropium*, and certain incantations are then repeated over it, it will render the person invisible who carries it about him.” Evidently there were skeptics before Bob Ingersoll.

AGATE OR ONYX.—The agate or ancient “*achates*” was a more or less popular stone in all epochs, since its varied lines and conformations were calculated to suggest ideas as to its mysterious origin and the resultant magic-working powers alluded to in many ancient writings including Pliny, Sokratēs Dionysios, Epiphanius, and the Orphic Poems.

The difference between agate and onyx has always been rather vaguely defined. Both are variegated quartz, and, perhaps the best line of demarcation is that the onyx consists of only two layers of different colors, a white and dark brown or black, whereas the agate is a combination of lines and layers, usually straight but often forced into wavy, zigzag, irregular and fantastic figures. The most usual shades are milky, bluish, yellowish or brownish whites, grays, yellows, reds, browns, and blacks.

The ancient varieties of “*achates*” were many, based in part on colors or combinations, and, doubtless, some of the gems were not agates at all. We refer to certain types, where the colors run regularly across the stone, as striped or banded agates, respectively when the lines are narrow or broad. When they run about a middle point, the gem is called a circle-agate and when the colors, breadth of lines, and size of the central point suggests the idea, an eye-agate. This last type

was, naturally, a wonder-worker of great power. Pliny describes one variety of eye-agate, the "Beli-oculus" (eye of Baal), held in the highest veneration by the Assyrians, as having a whitish iris about a black pupil. Also he refers to another, stating that the "Leucophthalmos, which in other respects is of a reddish hue, presents all the appearance of an eye in white and black."

NICOLO.—A definite agate or, more properly, onyx combination was the "Ægyptilla" or Arabian sardonyx of Pliny, which first came into fashion in the first century B. C. We know it as the nicolo. It consists of an opaque black or, rarely, a dark or even light brown layer, with a bluish white one superimposed. Intaglios in it were always cut through the light layer into the dark, so that the term, nicolo, has come to refer as much to the style of cutting as to the substance. Later in the Empire it was also the fashion to bevel off the edges, leaving a border of the dark layer.

SARDONYX.—This stone, as its name suggests, was, primarily, a kind of onyx in which the darker layer was sard. Pliny says, quoting from earlier writers, that the true sardonyx came from India and was transparent and that the opaque gems which had usurped the name in his day were then called "blind sardonyx." He also states that the Arabian sardonyx of his times presented no traces of the transparent Indian sard but that the name, sardonyx, was given to several varieties of colored stones, some in three colors, such as black, red, and white, so that it had come, doubtless, to include the onyx as well, or, perhaps, even, was distinguished from it by having three instead of two layers of different colors. Today, the last named distinction has also been maintained, but the only rational one is that which the name indicates: that the sardonyx is simply a layer stone in which the darker layer is sard, taking the term as covering all the shades from dark brownish red to light reddish yellow.

The Greeks and Etruscans, as I have already written, cut this gem across the layers, as they did the agate, but in Roman Imperial times the sardonyx was usually cut in the form of a

truncated cone, so that all the colors would show on the sides, and the intaglio was engraved in the sard layer forming the smaller surface.

ROCK-CRYSTAL.—Turning to the crystalline quartzes we have, first, the rock-crystal which needs no explanation and which occurred in Mycenæan and Greek times and, again, in Roman Imperial. Neither the Etruscans nor the early Italians used it. It was a favorite material during the Renaissance.

AMETHYST.—Also a crystalline quartz, this gem, while commoner than the preceding, followed generally its lines of occurrence. The deepest purples were the Indian stones. The lighter ones may have been Pliny's "hyacinthus." In amulet lore the amethyst was supposed, as its name indicates, to protect the wearer against drunkenness, also to insure access to the presence of kings, avert hail and locusts, and perform other desirable services.

BERYL.—Coming now to the more valuable stones imported from the East, after the conquests of Alexander, the beryl, a gem of the same character as the emerald, was perhaps most highly prized; so highly, in fact, that in Hellenistic and Augustan times such works as we find on it are always of merit. Pliny mentions a number of varieties of his "beryllus", under which name it is probable that he included some kinds of topaz. He speaks of those "Which in color resemble the pure green of the sea," those "Of a somewhat paler color but approaching a golden tint," which he calls the "chrysoberyllus" and, still more pale, the "chrysoprasus."

AQUAMARINE.—This variety of beryl, bluish green in color and probably referred to by Pliny as the hyacinthine beryl, was highly prized. It may also be the "hyacinthus" of his list. Such sea-colored stones, engraved with the figure of Poseidōn or some other sea-deity, were held to have the power of protecting their wearers from shipwreck and like perils.

TOPAZ.—Yellow topazes are found very rarely with ancient engravings. It was probably the "chrysolithos" of the ancients.

PERIDOT.—Our peridot or chrysolite, on the other hand,

seems to have been the "topazios" of Pliny and was also a stone very rarely used by ancient engravers.

MOONSTONE.—Even more rare are pictures on the moonstone, the ancient name of which is unknown. As with us it was always cut convex.

GARNET.—Most common of all the Eastern gems introduced in Hellenistic times were several varieties of the garnet. It was called "carbunculus" and "anthrax." From India came the pure transparent red without violet or orange intermixture. Excellent engraving is found on it. Also garnets having the orange or brownish tone, known as hyacinthine garnets and not easily distinguished from the true hyacinth or zircon, were great favorites, as were those with a violet shade—almandines; common, especially in the East throughout the Hellenistic and Græco-Roman periods. All were, as a rule, cut strongly convex and not infrequently with concave backs. Small garnets, sometimes cut flat, with cheap, rude engravings, were not uncommon even in Sassanian times.

TURQUOISE.—Our turquoise was probably the "callais" of Pliny. Hardly ever used by the Greeks, it was rarely employed by Græco-Roman artists.

LAPIS LAZULI.—"Cyanus" and "sapisrus," already alluded to as possible names for the sapphire, were much more probably lapis lazulis. Not much used in classic periods, it is sometimes found bearing cheap intaglios of Roman times and was rather common as a material of the Sassanian gem cutters. During the Renaissance it experienced a revival of an undesirable character to which I have alluded in place.

GREEN MALACHITE.—This was the ancient "molochitis" and was very rarely used.

SERPENTINE.—This stone was used considerably in Mycenaean times. Later there was no demand for it.

HEMATITE.—The old name of "hæmatitis" included not only the red jasper but also a class of iron-stones which run in color from dark steel gray to iron black or brownish red. Much used for Oriental cylinders, it had spread into Greece in the Mycenaean Age and appeared there also in the Archaic.

Later, it naturally fell into disrepute, only to be revived again in late Roman times, when the wonderful magic influence with which the Chaldæans had invested it made it a very common material for Gnostic talismans and amulets and for other wonder-working gems.

PORPHYRY.—Some kinds of porphyry were also used by Mycenæan engravers, but the later periods ignored it until the times of the Gnostics. It was also employed during the Renaissance.

STEATITE.—The various shades of steatite or soapstone; white, gray, pale yellow, greenish, reddish, brownish, and blackish, were favored in periods when signets were engraved directly by hand. Soft, generally opaque, though sometimes slightly translucent at the edges, it was an easy material to work and readily obtainable throughout the infancy of the art. Even later it was not altogether dropped by makers of the poorest and cheapest signets, but, with the general use of instruments turned by mechanism, it became easier to engrave a hard stone with the wheel than to cut steatite by hand, and its disuse followed naturally.

MARBLE.—A few gems were cut in this substance which had been used to some extent for the cylinders of the East. The “porphyrites leptospsephos” of Pliny was the red and white marble of Egypt.

SHALES.—These were used occasionally in the days of hand-cut stones.

Doubtless stray examples in other materials than those mentioned may occur, but they must be set down as in the class of exceptions.

CHAPTER III

HISTORICAL AND MYTHOLOGICAL SIGNETS

OF deep interest to the student of gems is the knowledge we have from ancient literature of the signet devices of many of the personages of antiquity. Few of the stones themselves have been found and identified, but the chances are that most of them are still in existence and the possibility of a discovery and satisfactory identification in such a line is always one of the romantic dreams we love to cherish. A list of these devices is desirable from every standpoint.

POLYKRATĒS; TYRANT OF SAMOS.—A lyre, engraved on a smaragdus by Theodōros of Samos. Clemens Alexandrinus (III, 11), Hērodotus (III, 41) and Pausanias (VIII, 14) merely say that the stone was a smaragdus. Dr. Benndorf, in his reading of Pliny (XXXIV, 19), maintains that the famous portrait statue of Theodōros, made by himself, held in its hand, not a minute quadriga, but a scarab engraved with a quadriga, and that this was, doubtless, the famous device (*Zeitschrift für die Oesterreich Gymnasien*, 1873, pp. 401—411). If he be right, however, about the reading I would be inclined to infer that the quadriga would be as likely to have been the signet of the artist himself as of his royal patron.

AMPHITRYŌN; (mythical).—Hēlios rising in his chariot (Plautus' *Amphitryōn*; Act 1, Scene 1). Of course a fiction of the playwright, but interesting in its choice of subject.

ORESTĒS; (mythical).—According to Sophoklēs (*Ēlektra*), Orestēs' signet pictured the ivory shoulder of Pelops. The subject suggests something in the nature of the bent arm or leg pictographs on Cretan gems.

ODYSSEUS.—Another mythical signet is the dolphin which

legend fixes as the device of Odysseus. Plutarch, in his *De Sollertia Animalium*, (XXXVI), quotes Kritheus' testimony, from the *Zakynthian Records*, to the above effect.

XERXĒS.—A nude female figure with disheveled hair, probably Anaitis (Polyainos); but the scholiast on Thukididēs (I, 129) says: "The signet of the king of the Persians bore, according to some, the monarch's own portrait; according to others that of Cyrus, the founder of the monarchy, or, as others again say, the horse of Dareios, in virtue of whose neighing he was elected king." Any of these latter would doubtless be of Greek workmanship. The design given by Polyainos was not uncommon on Oriental seals, both cylinders and cones, and seems more probable.

BATTOS; KING OF KYRĒNĒ.—A figure of himself with a personification (or the genius) of the city of Kyrēnē bringing him an offering of a sylphium plant. A. S. Murray, in his introduction to the *Catalogue of Engraved Gems in the British Museum*, refers to this device but neglects to cite his authority.

ISMĒNIAS; THE FLUTE PLAYER.—A figure of the nymph, Amymonē, engraved on a smaragdus (Pliny, XXXVII, 3).

KLEARCHOS; ONE OF THE GENERALS OF CYRUS THE YOUNGER.—The maidens of Karya in Lakōnia dancing in honor of Artemis. Given by him, when a prisoner awaiting death, to Ktēsias, the physician of Artaxerxēs, as an acknowledgment of his favor in obtaining a comb for his hair which was worn long after the Spartan fashion. (Plutarch's *Life of Artaxerxēs*).

ALEXANDER THE GREAT.—After his conquest of Dareios, Alexander is said to have used for his Persian edicts the conquered king's signet, perhaps the green chalcedony cylinder now in the British Museum showing the monarch in his chariot and which bears the legend, "I Dareios the King." His personal seal, used for all other purposes and set in the ring he gave when dying to Perdikkas, may have borne a lion emblematic of his descent from Hēraklēs, as stated by King; the device with which, according to Plutarch, Philip dreamed he had

sealed up his wife's womb. Perhaps it was a smaragdus engraved with his portrait by Pyrgotelēs.

SELEUKOS.—An anchor. Justin (XV, 4) tells that the mother of Seleukos dreamed that she had conceived a son by Apollō who gave her a ring which he desired her to give to the child she should bear, and, on awaking, she found in her bed what she took to be the signet of the god, engraved with the above device, which she presented to her son when he was going, with Alexander, to the Persian wars.

KALLIKRATĒS; A COURTIER OF PTOLEMAIOS III (EUREGETĒS).—A head of Odysseus (Athenæus, VI, 59).

PYRRHOS; KING OF EPEIROS.—Pliny states (XXXVII, 3) that this king possessed an agate which showed Apollō playing a lyre with the nine Muses around him, the picture being portrayed solely by the veins in the stone without the aid of engraving. This, of course, could not have been used as a signet.

PTOLEMAIOS VIII, SURNAMED LATHYROS OR SŌTĒR II.—A portrait of himself engraved on a very precious smaragdus which he gave to Lucullus, on the latter's departure for Rome.

ATHĒNION; AMBASSADOR FROM ATHENS TO THE COURT OF MITHRIDATĒS.—The portrait of that monarch (Athenæus, V, 49).

AREIOS; KING OF SPARTA.—An eagle grasping a serpent in its talons (Josephus' *Antiquities of the Jews*, XII, 4).

In the time of Pausanias (III, 11) the Spartan government sealed all their public documents with the portrait of Polydōros, one of their ancient kings.

"KING HYDASPĒS, OF ETHIOPIA".—Dr. King, with his not uncommon inaccuracy, attributes to this imaginary monarch the signet ring described by Hēliodōros, Bishop of Triikka, about 400 A. D., in Book V of his *Theagenēs and Charicleia*, as having been given by Kalisiris to Nausiklēs, as a ransom for the heroine of the tale. The gem, says that author, was an amethyst of deep purple, "Of the size of a maiden's eye," engraved with the picture of a shepherd seated on a rock and piping to his sheep, the whole being surrounded by a cable

border which is spoken of figuratively as a stone wall to restrain the wandering of the flock. Now this gem is described so minutely that it evidently belonged to or was one admired by Hēliodōros himself and, as such, is most interesting, and could probably be identified if ever found. This is *not*, however, the gem assigned by him to Hydaspēs and worn by his daughter, Charikleia. The latter is described in Book VIII of the same work as a "pantarbē inscribed with sacred letters." What the pantarbe was we do not know. The idea of the sacred letters was doubtless got from the Gnostic talismans of Hēliodōros' time.

LUCIUS CORNELIUS SCIPIO BARBATUS; CONSUL, 298 B. C.—The earliest known Roman signet with personal affiliation is the standing figure of Victory with wreath and palm branch on a sard which is stated by Middleton and intimated by King to have been found in 1780 in the sarcophagus of Lucius Cornelius Scipio Barbatus, and is "now" (1891), according to the former authority, in the possession of the Duke of Northumberland. King's statement is clouded by his usual inaccuracies, such as that the gem was given in 1780 by Pope Clement XIII (who died in 1769) to M. Dutens, the traveling companion of Lord Beverley. How far Middleton has followed King in his facts, I do not know, but the picture strikes me as incongruous, both in subject and treatment, with the Roman cuttings of that period, and, as several sarcophagi of later Scipios were found in the same tomb, it seems possible that it may have belonged to one of these. Without the basic evidence in hand and in view of the looseness of records of discovery at that time, I feel bound to hazard such a query.

QUINTUS CORNELIUS LUPUS.—A sard, formerly in the Waterton Collection, bearing a horse's head and two Gallic shields, commemorative of the victory of one of his kinsmen, either C. Cornelius Cethegus who defeated the Insubres in 197 B. C., or P. Cornelius Scipio Nasica who overcame the Boii in 191. Possibly, by the introduction of the two shields, the owner may have referred to both exploits.

MARCELLUS; THE OPPONENT OF HANNIBAL.—There is a

portrait head, with the rim of a shield showing in front, engraved on a light sard in the King Collection at the Metropolitan Museum, about which Dr. King hazards the most interesting and perhaps not impossible guess that this may be the signet which Hannibal took from the finger of the dead consul and with which, on forged letters, he is said to have tried to deceive several towns which held to the Roman alliance. The good Doctor holds that the likeness agrees exactly with that of Marcellus on the denarii of the Claudian gens. Counter to this supposition is the fact that the date, 208 B. C., is very early for a Roman portrait head on a gem. See Plate XVIII, 25.

PUBLIUS CORNELIUS SCIPIO AFRICANUS.—The head of Syphax, King of the Numidians. This attribution is given in the Chambers Encyclopædia article on gems and in other books of reference. I assume that some original authority for the statement exists but I have been quite unable to unearth it.

The son of the native of Intercatia, said to have been located not far from Astorga in Spain, whose father was slain in single combat with Publius Cornelius Scipio Æmilianus, chose a picture of the duel for his signet device, and Stilo Præconinus, quoted by Pliny (XXXVII, 4), jokingly asked what the man would have done had his father slain Scipio. See, also, *Epitome of Livy* (Book XLVIII).

GNÆUS SCIPIO (There is some doubt as to the full name); **THE DEGENERATE SON OF SCIPIO AFRICANUS.**—His father's portrait (Valerius Maximus, III, 5).

LUCIUS CORNELIUS SULLA.—According to Pliny (XXXVII, 4) and Plutarch's *Life of Sulla*, the dictator's seal was a picture of the surrender to him, by Bocchus, of Jugurtha, probably as it is portrayed on his denarii. Valerius Maximus (VII, 14) also mentions this device, but Dion Cassius (XLII, 18) states that, like Pompey's signet, Sulla's showed three trophies, to commemorate his victories over the generals of Mithridatēs, a device borne on the reverse of another of his denarii. Possibly the former was changed for the latter in his later years.

GNÆUS POMPEIUS MAGNUS.—According to Dion Cassius

(XLII, 18), Pompey's signet, with which Cæsar verified his death to the Senate, also displayed three trophies, probably to commemorate his victories over Mithridatēs, the Cilician pirates, and the Arabians, but Plutarch, in his *Life of Pompey*, states that the signet sent by the murderers to Cæsar showed a lion with a sword in its paw. These descriptions are necessarily contradictory and the divergence cannot be explained on the theory of a change of signet.

CAIUS JULIUS CÆSAR.—A figure of Venus Victrix (Dion Cassius, XLIII, 43).

PUBLIUS LENTULUS SURA; ONE OF THE LEADERS IN THE CONSPIRACY OF CATILINE.—A portrait of his grandfather, Publius Cornelius Lentulus, consul 162 B. C. (*Cicero against Catiline*, III, 5).

AUGUSTUS.—His first recorded signet was engraved with the figure of a sphinx; Pliny (XXXVII, 4) stating that Augustus had found two gems bearing this device among the effects of his mother, but that, on his friends' joking him about the diplomatic vagueness of his letters and edicts during the times of the civil wars and the appropriateness of the sphinx as a seal for "enigmas," he adopted instead a gem bearing a likeness of Alexander the Great, perhaps one of the famous smaragdi engraved by Pyrgotelēs. Pliny's statement here seems to be exclusive, but, earlier in the same chapter, he tells of "A very excellent likeness of the late Emperor Augustus" which was engraved by Dioskouridēs upon a signet which, ever since, the Roman emperors have used. That would include Domitian. Dion Cassius (LI, 3), writing in the second half of the 2nd century A. D., says of Augustus' signets: "He had had the seal which he used most at that time" (The Civil Wars) "made double, with a sphinx rising on both sides. Subsequently, he had his own image made in intaglio and sealed everything with that. Later emperors likewise employed it except Galba." Certainly this reads as if the sphinx seal was a cameo which would be, to say the least, remarkable and unique.

CAIUS CILNIUS MÆCENAS.—This famous connoisseur and

patron of the arts had a frog engraved on his seal (Pliny, XXXVII, 4).

KLEOPATRA.—An epigram in the Greek Anthology, attributed both to Asklēpiadēs and to Antipatros of Thessalonika, describes the signet of the Egyptian Queen as an amethyst engraved with a figure of Methē.

NERO.—While there is no record of its use as his signet, Suetonius tells (*Life of Nero*, Chap. 46) that Sporus, one of the emperor's favorites, made him a new-year's present of a ring with a gem engraved with a picture of the rape of Proserpina: an ill-omened subject, as being emblematic of death and a favorite device on tombs.

PALLAS; FREEDMAN OF CLAUDIUS.—Cav. Paolo Alessandro Maffei, in his *Gemme Antiche Figurate* (Vol. III, p. 182) tells of a carnelian engraved with a picture of Bellerophōn spearing the Chimaira, found among the ashes in a porphyry urn in a sumptuous tomb on the Via Tiburtina, about a mile from Rome. Maffei's argument, citing Pliny the Younger and Tacitus, is ingenious and establishes a very reasonable probability that this was, indeed, the signet of Pallas. His tomb was located on the Via Tiburtina, near the first mile-stone, and his claimed descent from the "Kings of Arcadia," while alleged in reference to the "Arcadians" who were fabled to have settled on the Palatine Hill, was, doubtless, suggested by his birth in Arkadia, in Peloponnesos, the people of which held close relations with the neighboring city of Korinth where Bellerophōn was the national hero.

GALBA.—A dog bending forward from the prow of a ship; his ancestral device. (Dion Cassius, LI, 3).

HADRIAN.—His own portrait (Spartianus' *Hadrianus*, Chap. 26). This ring's slipping from his finger while he was taking the auspices on new-year's day was considered an omen of his approaching death.

PLINY THE YOUNGER.—A quadriga (*Letters*, X, 26).

COMMODUS.—According to Lampridius, in his *Life of Commodus*, that emperor had a picture of his mistress, Marcia, garbed as an Amazon. The text does not state that this was

a signet, but Capitolinus, in his *Life of Clodius Albinus*, quotes a letter of Commodus to Albinus in which its seal is referred to as being the figure of an Amazon. The two taken together make it clear that the emperor's signet was Marcia, pictured as an Amazon.

CONSTANTIUS II.—A sapphire with a picture of the Emperor spearing a wild boar in the plains of Cæsarea, the locality being typified by a recumbent female figure and the legend, ΚΕCΑΡΙΑ ΚΑΠΠΙΔΟΚΙΑ. The name, CONSTANTIVS AVG, identifies the signet, which is owned by Prince Trivulzio of Milan.

MARCIA; DAUGHTER OF STILICHO AND WIFE OF HONORIUS, FIRST EMPEROR OF THE WEST.—A note to Book XXXVII, Chap. 16, in the Bonn translation of Pliny tells of an emerald found in her tomb in 1593 and "now" in the Vatican with the head of her husband engraved upon it.

MAURITIUS; EMPEROR OF THE EAST, 578-602 A. D.—King states, in his *Handbook of Engraved Gems*, that the great seal of this emperor, a chalcedony, 2 by 1½ inches in size, bearing his bust in full face, with the orb of empire in his hand and the legend, D. N. MAVRITIVS. P. P. AVG., was catalogued in the sale of the Mertens-Schaafhausen Cabinet in 1859, as having been dug up at Gräfin near Bonn, and speaks of the gem as the most important example of its class anywhere extant. In his *Antique Gems and Rings* he refers to the same stone as having been heired by Madame Mertens-Schaafhausen of Bonn with the rest of the Praun gems, and goes on to state, with his usual looseness and proneness to contradiction, that "It has a somewhat suspicious look about it and may, after all, be nothing more than a work of the Renaissance."

PHOCAS; THE MURDERER AND SUCCESSOR OF MAURITIUS.—The same authority also speaks of the seal of Phocas, as being in the cabinet of M. Montigny of Paris: a portrait in all respects similar to the full-face likeness on the solidi, 1 by ¾ inches in size and done on a lapis lazuli.

COMNENUS.—The seal of a prince of this house in the twelfth century is referred to by King as No. 49 in the *De la*

Turbie Cabinet: a carnelian adorned with arabesques, quite in the Saracenic style, which encircle the legend, KOMNHNOC TOY CEBACTOY (Comnenus, son of Augustus).

ALARIC; KING OF THE GOTHs.—A bust in full face, poorly done on a sapphire and inscribed, ALARICVS REX GOTHORVM. Described by King as being in the Vienna Cabinet.

DESCRIPTION AND EXPLANATION OF PLATES

DESCRIPTION AND EXPLANATION OF PLATES

IN earlier works on this subject there has been a tendency to ignore in the illustrations the great mass of ordinary and poor gems which are, nevertheless, highly interesting to the student and much more obtainable by collectors than are the masterpieces of ancient art. In these plates I have tried to give such stones an adequate representation. Where ownership is not otherwise indicated the examples are in my own collection, and where ownership is noted as unknown or the gem as having belonged to some one of the great collections that have been dispersed I have been courteously permitted to avail myself of the collection of casts owned by Tiffany & Co. of New York.

PLATE I

MINOAN GEMS

(These stones are bored through the longer axis.)

1. Yellowish chalcedony from Crete, Berlin Museum (Catal. No. 56). Long parallelopiped with the four unbored sides engraved as follows:

(a) A ship with rigged mast and oars and what seem like two crescents above; also a figure like a St. Andrew's cross with a ball at the end of each arm, and a third object which is undeterminable. There is a suggestion of a double line border along two of the sides.

(b) Divided in three parts by double lines. These bear pictographic symbols the first two of which are undeterminable. The third is an eye.

(c) Pictographs, among which are recognizable a human leg, a double circle, and a plant of some kind.

(d) Pictographs, including a plough (?), scissors (?), saw (?), and two of the same kind of cross figures as on "a."

2. Hematite, from Crete, in British Museum (Catal. No. 74). Glandular stone with truncated ends.

Two oxen, of one of which only the head is shown. Before the other is a man, his body distorted to fit in the field

of the gem in which, also, are several symbols, probably of the Minoan script.

3. Dark reddish steatite, from Crete, in Berlin Museum (Catal. No. 34). Lens-shaped stone.

Two lions arranged heraldically with fore-feet on a pedestal between them and heads regardant. Above is a sun.

4. Agate, from Crete, in Boston Museum (No. 81,133). Three-sided stone. The three faces are ovals, and all are engraved very crudely.

(a) An animal of some sort, probably a cow.

(b) Three objects that look like archery targets.

(c) Four circles, three of them double, each surmounted by a ball.

5. Carnelian, from Crete, in Berlin Museum (Catal. No. 2). Lens-shaped stone.

A female figure wearing a diadem and a bell-shaped skirt and shooting a bow. Evidently some goddess, perhaps Rhea or Artemis. She seems to be girt with a sword and has a quiver on her back. The full, bare bosom indicates fruitfulness.

6. Red and white agate, from Crete, in Berlin Museum (Catal. No. 50). Stone with three convex, oval sides, all engraved.

(a) A ship with two masts and sails.

(b) A female figure, undoubtedly some goddess, in a bell-shaped skirt with deep border. She bears a branch in her hand, and behind her there seems to be a similar object.

(c) A fish.

7. Light greenish steatite, from Crete, in Berlin Museum (Catal. No. 62). Stone with three almost rectangular sides, all engraved by hand in crude, early fashion.

(a) Three fishes.

(b) A demon-like figure, before whom stands a spear or staff, from which four roundish objects seem to be hanging.

(c) Two men and a bird.

8. Carnelian, from Crete, in British Museum (Catal. No. 78). Lens-shaped stone calcined by fire.

Three men, the middle one with a three-cornered head (some demon?) or wearing a three-cornered hat or helmet. The first seems to be leaping. Possibly it represents athletic games.

9. Serpentine, from Crete, in Berlin Museum (Catal. No. 12). Lens-shaped stone.

A demonic figure, with an animal's head, bearing a dead stag on his shoulder. Before him is a bush and, on each side, a star, perhaps merely to fill the field.

10. Hematite, from Crete, in British Museum (Catal. No. 75). Lens-shaped stone.

A naked man, in distorted attitude, seizing a bull by the horn. Perhaps it pictures some sport of the Cretan bull-ring.

11. Carnelian, from Knossos, Crete, in British Museum (Catal. No. 79). Glandular stone.

Two-horse chariot with curious pole arrangement similar to that found in Assyrian sculptures. The driver holds the reins high and has a whip with two lashes. At each end of the picture double decorative lines are used to fill the field.

PLATE II

MYCENÆAN GEMS

(These stones are bored through the longer axis.)

1. Rock-crystal, from Phigalia, in Berlin Museum (Catal. No. 10). Lens-shaped stone.

A naked man, undoubtedly a god, standing between two demonic figures which he is holding, as it appears, by their tongues. The monsters have horse-like heads, lion's legs, human arms, and lower bodies like those of insects.

2. Agate, from Athens, in Berlin Museum (Catal. No. 43). Glandular stone.

A griffin (?) swooping down with wide spread wings upon a running lion which turns its head to defend itself.

3. Darkish carnelian, in Boston Museum (No. 01, 7572). Lens-shaped stone.

A bull (or cow) turning to lick its hind foot.

4. Carnelian, from Peloponnesos, in Berlin Museum (Catal. No. 40). Glandular stone.

A man, with long hair, spearing a boar in a marsh.

5. Banded agate, from Peloponnesos, in Berlin Museum (Catal. No. 20). Lens-shaped stone.

A bull, falling, with a spear thrust into its neck.

6. Brown-red jasper with small white spots, in Berlin Museum (Catal. No. 48). Glandular stone.

A confused design, perhaps meant to represent a wood or thicket. The introduction of several crescents in the picture doubtless has some significance.

7. Mottled red and grayish jasper, in Boston Museum (No. 01, 7563). Lens-shaped stone.

A bull with head turned as if licking his back. Below is an ornament shaped somewhat like the Mycenæan shield. Above the back are two ornaments that may be meant to represent sacred knots, like the ivory one from Knossos figured in Vol. IX of the Annual of the British School at Athens, p. 8.

8. Amethyst, in Boston Museum (No. 01, 7567). Glandular stone with truncated ends.

A lion, with head turned back, pierced by an arrow.

9. Banded agate, in Berlin Museum (Catal. No. 22). Lens-shaped stone.

A bullock, with tongue hanging out and a short sword thrust in the back of its neck, lying on what is, doubtless, intended to represent an altar. A palm tree curving around part of the rim of the stone may suggest the grove of a neighboring temple. Evidently the picture shows a sacrifice.

10. Hematite, in British Museum (Catal. No. 80). Glandular stone with truncated ends.

A male figure with drapery about his hips, holding up a fish by the line with which he has caught it.

11. Hematite, in British Museum (Catal. No. 37). Lens-shaped stone.

A bull attacked by a lion and a griffin. All three are drawn in curious distorted attitudes, so as to fit the field. The bull's head is in full front and exaggerated for decorative effect.

12. Sardonyx, from Elis, in Berlin Museum (Catal. No. 3). Lens-shaped stone.

A woman, evidently a goddess, perhaps Artemis, holding up a goat by the horns to symbolize her sway over animals. The upper part of her body is bare, with the breasts emphasized, and she wears a bell-shaped, decorated skirt.

13. Carnelian, in Boston Museum (No. 01, 7574). Flat, almond-shaped stone.

Two antelopes lying down, one with its head turned back.

14. Carnelian, in British Museum (Catal. No. 55). Lens-shaped stone.

Two ibexes arranged heraldically with fore-feet raised and heads regardant.

15. Serpentine, from Athens, in Berlin Museum (Catal. No. 6). Lens-shaped stone.

Two men, with bird-like heads, rushing at each other, grasping each other's heads, and stabbing with short swords. Several round objects in the field may represent stones which they have thrown.

16. Steatite, in British Museum (Catal. No. 30). Lens-shaped stone.

A lion looking upward toward a griffin that hovers above him with spread wings.

17. Agate (calcined), in British Museum (Catal. No. 43). Short hemicylindrical stone, broader in the middle.

Two goats, one with head turned back. Two bushes are arranged so as to fill the field.

18. Red jasper, in Boston Museum (No. 98,713). Lens-shaped stone.

A cow suckling a calf.

19. Agate, with vertical bands of bluish white and yellowish brown, in Boston Museum (No. 01,7582). Rectangular stone.

A man falling beneath a bull.

20. Chalcedony, in Boston Museum (No. 01,7548). Lens-shaped stone.

A cow suckling a calf. Around part of the rim bends a thistle-like plant.

21. Brown and white striped agate, from Peloponnesos, in Berlin Museum (Catal. No. 49). Stone with three convex sides, two of which are engraved.

On the one shown here are two boars lying down with rushes rising over them. Several oblique lines fill the exergue.

PLATE III

GEMS OF THE GREEK MIDDLE AGES

(These stones are bored through the longer axis except when otherwise stated.)

1. Greenish mica-slate, from Megara, in Berlin Museum (Catal. No. 80). Flat, round stone with the upper side smaller and engraved on both sides.

(a) On the larger surface are the fore-parts of two horses in reversed positions and joined to one body. In the field are three bushes.

(b) On the smaller surface is a demonic figure with wings hanging down from his shoulders.

2. Whitish steatite scaraboid, from Cyprus, in Berlin Museum (Catal. No. 71).

A chariot or cart carrying three men and drawn by one horse. Probably a second is to be assumed to be beyond him.

3. Soft whitish stone scaraboid, from Asia Minor.

A rudely drawn animal (goat or bull) with a bush before it.

4. Steatite scaraboid, from Kamiros, in British Museum (Catal. No. 130).

Rosette made up of eight leaves. Cable border.

5. Serpentine, in British Museum (Catal. No. 97). Flat rectangular stone, engraved on both sides.

(a) A central disk with rays.

(b) A bull sinking on one knee, with head turned back and a crescent in the field above him.

6. Serpentine, in British Museum (Catal. No. 102). Scarab-like stone with a crouching lion in place of the beetle relief.

A man holding a horse by the head. Above the horse is a bird and beneath him what may be meant for a fish.

7. Steatite scarab, from Kamiros, in British Museum (Catal. No. 142).

The tree of life, beneath which are two oxen (?) arranged symmetrically with heads bent down. Under each of them is an Egyptian crux ansata.

8. Bright green steatite, from Beirut, in Berlin Museum (Catal. No. 78). Flat seal with a bored handle.

Two men, apparently about to cut down a large stalk of grain or, perhaps, a tree which stands between them.

ISLAND STONES

(These stones are bored through the longer axis except when otherwise stated.)

9. Yellowish steatite, in British Museum (Catal. No. 82). Lens-shaped stone.

Hēraklēs contending with a sea-demon whose body is covered with scales and ends in a fish's tail. Perhaps it is

the one from whom he rescued the daughter of Laomedōn. The hero is nude, bearded, and has a quiver slung on his back. Two fishes fill the field of the gem.

10. Whitish steatite, from the Greek islands, in British Museum. Lens-shaped stone.

A winged sea-horse. Half the rim of the field is filled with two lines of joined drill holes which form a sort of irregular half-border.

11. Steatite, in British Museum (Catal. No. 24). Lens-shaped stone. Pēgasos.

12. Steatite, in British Museum (Catal. No. 56). Lens-shaped stone.

A goat with its body distorted and hind legs raised so as to fill the field above its back. A drill-hole and a feather motive decoration are also introduced for the same purpose.

13. Light greenish, translucent steatite, in Berlin Museum (Catal. No. 92). Glandular stone.

A boar with head down, as if feeding. Two lines decorate the back of the gem.

14. Meerschäumlike stone, from Melos, in Berlin Museum (Catal. No. 96). Lens-shaped gem, engraved on both sides.

Chimaira. In the field are four drill-holes and several lines with cross strokes. The exergue is filled with a row of downward strokes. On the other side of this gem (not figured) are a man and woman in an obscene attitude.

15. Light greenish, translucent steatite, from the Greek islands, in Berlin Museum (Catal. No. 90). Lens-shaped stone.

A wild goat (or ibex) leaping, with head turned back. Characteristic feather decoration in the field.

16. Steatite, in British Museum (Catal. No. 86). Glandular stone. A griffin with head turned back.

17. Grayish green steatite, in British Museum (Catal. No. 81). Lens-shaped stone engraved on both sides.

(a) A naked man, stretched on his back, with a large bird attacking him; perhaps Promētheus and the eagle.

(b) A pattern of symmetrically arranged lines.

PLATE IV

ARCHAIC GREEK GEMS OF THE SIXTH CENTURY, B. C., AND THE FIRST
TWENTY YEARS OF THE FIFTH

(These stones are bored through the longer axis except when otherwise stated.)

1. Rock-crystal scaraboid, from Cyprus, in Berlin Museum (Catal. No. 140).

Seilēnos, reclining, with a kantharos in his hand. By his knee stands a two-handled vessel for mixing wine. The hair and beard are treated in the early manner of archaic art.

2. Carnelian scarab, from Corneto, in Berlin Museum (Catal. No. 137).

Tityos, with long hair and beard, kneeling and trying to draw the arrow from his side. Early Greek work for the Etruscan market. The border is especially ornate.

3. Light translucent carnelian scaraboid, in Berlin Museum (Catal. No. 173).

It is engraved on top, bottom, and along both sides. Only the first two are here pictured. Both have the cable border.

(a) On the flat base, a lion with a dolphin above and an ear of grain below.

(b) On the convex top, a four-horse chariot represented in full front. The driver seems to be nude and is raising his arm. A zigzag line fills the exergue. The work is apparently of the end of the sixth or the early fifth century.

4. Chalcedony scarab with light brownish spots, from Greece, in Berlin Museum (Catal. No. 156).

A nude, unbearded warrior with spear and shield. Done very much in the style of the West Aigeinetan pediment. Cable border. Work of about the same period as No. 3, above.

5. Plasma, probably cut down from either a scarab or a scaraboid, in Berlin Museum (Catal. No. 299).

Diomēdēs, nude and stretched on a sort of bier, while his four man-eating horses stand above, one of them biting him. Hēraklēs stands by his head, and a palm tree rises at the left. Cable border. End of sixth century.

6. Hematite scarab, from Aigeina, in Berlin Museum (Catal. No. 124).

A winged goddess, draped, probably Artemis, holding

up a lion and a goat by their tails. Cable border. Work of the early sixth century.

7. Plasma scarab (calcined?), from Falerii, in Berlin Museum (Catal. No. 136).

Hēraklēs, bearded and wearing his lion's skin, contending with the river-god Achelōos who is represented as a bull with a manlike face and whose power of transformation is suggested by the serpent and the dolphin in the field. Hēraklēs is grasping him by the horn and tail. Cable border. The exergue is filled with cross-hatchings. Early Ionian work done for the Etruscan market.

8. Carnelian scarab, in Berlin Museum (Catal. No. 161).

A draped figure the sex of which is uncertain reclining on the back of a running bull and holding him by the horn. It may be meant for Eurōpē or, if male, for Dionysos. The shape of the garment argues for the former hypothesis, but the fact that the rider looks a little as if meant to be bearded might negative such a supposition. The crudeness of the work on the very small figure, however, leaves the point uncertain. The engraving is polished. Border of joined drill-holes. Probably rather early sixth century work.

9. Black jasper scarab, in Berlin Museum (Catal. No. 164).

Head of a negro in a high crested helmet. Cable border. Work of the early transition period, still showing signs of the severe style.

10. Black jasper scaraboid, in Berlin Museum (Catal. No. 175).

A cow suckling a calf. The engraving is highly polished. Cable border. Probably sixth century work.

11. Carnelian scarab, in Berlin Museum (Catal. No. 162).

A bearded head done in severe style. Cable border. Early work of the sixth century.

12. Translucent carnelian scarab, from Aigeina, in Berlin Museum (Catal. No. 157).

A bearded, naked man kneeling with both hands to his breast. The hair and beard are done with the drill. Cable border. Probably later sixth century work.

13. Translucent, diagonally striped sardonyx scarab, in Berlin Museum (Catal. No. 168).

A lion devouring a bull. Cable border. Probably middle sixth century work.

14. Carnelian scaraboid, from Greece, in Berlin Museum (Catal. No. 176).

A nude negro in a squatting position. The breast and belly are very crudely done. Cable border. Sixth century work.

15. Scarab of opaque white stone, from Melos, in Berlin Museum (Catal. No. 154).

A crouching demon, like those of the Mycenæan epoch, with the upper part of a lion and the lower part human. The surface of the stone is damaged and no border shows in the cast. Probably sixth century work.

16. Rock-crystal scarab, from Crete, in Berlin Museum (Catal. No. 141).

A sphinx seizing a naked man whom she has overthrown. The hair is worked out in the older style. Cable border. Engraving unpolished. Work of not later than the middle of the sixth century.

17. Chalcedony scaraboid, in Berlin Museum (Catal. No. 160).

An unbearded Hermēs in a kneeling position, wearing the petasos and nude but for a scarf thrown over his shoulders. He carries his caduceus. Very fine work of the late transition period with the muscles and the linea alba well worked out. The engraving is highly polished. Cable border.

18. Carnelian scarab, from Italy, in Berlin Museum (Catal. No. 169).

A human leg with the knee bent up and the genitals showing, beyond which the figure ends in the forefront of a horse. A drill-hole occupies the field above. Cable border. Probably south Italian Greek work of the later sixth century or early transition period.

19. Bluish black, white speckled agate scarab, from the Troas, in Berlin Museum (Catal. No. 159).

A nude woman, probably a Naiad, in kneeling attitude, holding a hydra (water jar) into which water is running from a lion-head spout. She wears a hood and ear-ring. Inscription, $\Sigma\text{HMONO}\Sigma$ (of Sēmōn). Furtwängler holds this to be the name of the artist, in the genitive, but it seems to me at least as likely to be that of the owner. Cable border. Striking Ionic work of the transition period.

20. Greenish jasper scarab, in British Museum (Catal. No. 241).

An unbearded Scythian archer fleeing and turning to loose his arrow at some pursuing foe. Cable border.

21. Green jasper scarab, in Boston Museum (No. 98,714).

A lion attacking a boar. Cable border. Sixth century work showing Phœnician influence.

22. Green jasper scarab, in British Museum (Catal. No. 239).

A warrior running with bent knee action, with helmet, shield, lance, and crude suggestion of mantle. Cable border. Poor sixth century work.

23. Carnelian scarab with a seirēn substituted for the beetle relief, in British Museum (Catal. No. 248).

Nude, kneeling figure of the Hyacinthine Apollō, his lyre under his arm and holding a flower. Similar to the type on the Tarentine coinage. Cable border.

24. Banded agate scarab, in British Museum (Catal. No. 265).

Hēraklēs, nude and armed with his club, raising one foot to bind his sandal. An early appearance of the sandal-binding motive in the late archaic period.

PLATE V

ARCHAIC GREEK GEMS (*concluded*)

(*These stones are bored through the longer axis except when otherwise stated.*)

1. Grayish brown and white agate scarab, in British Museum (Catal. No. 289).

Seilēnos in a bent-over attitude, apparently dancing and holding a goblet in his hand. At his feet is a large wine krater. He has horse's ears and hoofs, and his hair and beard are done entirely with drill-holes. The belly muscles are shown in three folds, in the style of the early archaic art. Cable border. The engraving has no polish. Sixth century work.

2. Bright greenish, half translucent steatite, in scarab form but with a satyr's head instead of the beetle relief, in British Museum (Catal. No. 479).

A bearded citharist in a long tunic, crowned with a diadem and holding a lyre and plectrum. One foot is raised, resting on a rock. Around the edge runs the inscription in damaged letters, ΞΥΡΙΕΞ ΕΠΟΙΕΞΕ, held to be the signature of Syriēs, an Euboian artist of the Ionic School, though the letters are much the worse for age and have been differently read. Cable border.

3. Carnelian scarab, in British Museum (Catal. No. 333).

Hēraklēs, unbearded and nude, without his lion's skin but bearing club, bow, and quiver. The work is of the sixth century and seems to show some Phœnician influence as does the simple line border.

4. Grayish white banded agate scarab, from Sicily, in British Museum (Catal. No. 295).

A centaur with long hair, beard, horse's ears, and nose of the Seilēnos type carrying off a woman dressed in a long tunic. His fore-legs are human and the horse's body begins at the buttocks of the Seilēnos figure. He has double genitals. The engraving is unpolished. Cable border. Sixth century work.

5. Carnelian in scarab form but with a negro's head instead of the beetle relief, in British Museum (Catal. No. 471).

Flying seirēn with a wreath (or pearl necklace) in her hand. She wears a cap with a long streamer decorating it. Cable border.

6. Translucent carnelian scarab, in British Museum (Catal. No. 264).

A kneeling female demon with four wings and a cow's (?) head. Cable border. The conception seems to show an Oriental influence.

7. Rock-crystal scarab, in British Museum (Catal. No. 249).

Winged Nikē with a flower in one hand and holding up her drapery with the other. The right knee is sharply bent and she wears a hood. Border of drill-holes. Sixth century work.

8. Translucent carnelian scarab (calcined), in British Museum (Catal. No. 250).

A kneeling warrior in helmet and Ionic corselet carrying a naked dead man on his shoulder. Probably Menelaos and Patroklos. Cable border.

9. Carnelian scarab, in British Museum (Catal. No. 266).

Hēraklēs, unbearded, nude, and without the lion's skin, brandishing his club and carrying the tripod. The dog, Kerberos, runs beside him, three serpents rising from his back. A star decorates the field. Border of joined drill-holes. Sixth century work.

10. Bluish chalcedony cone with eight-sided base like the later Assyrian, Babylonian, and Persian shapes. The boring does not run through. In Boston Museum (No. 95.80).

Hēraklēs in a short tunic and with a short beard. His head and legs are in profile but his back is turned to the front. In one hand he holds his club and with the other a lion by the head. Facing him is Medousa, also in a tunic, with head and body shown full front and legs in profile. She is winged and carries two lions by the tails. Her head is of the terror-inspiring type with serpent locks rising from it. Ionic work of the sixth century showing strong Oriental influence.

11. Carnelian scarab, in British Museum (Catal. No. 321).

A man driving a two-horse chariot. Behind him another man with a horse are facing in the opposite direction. Cable border. Ionic work of the sixth century.

12. Carnelian scarab, in British Museum (Catal. No. 233).

A winged demon of the Seilēnos type with the hind half of a lion joined to his buttocks, kneeling on one knee and holding a goat by the fore-leg and horn. Cable border, the exergue filled with cross-hatching. Sixth century work showing Phœnician influence.

13. Bluish chalcedony cone, like No. 10, in Boston Museum.

Two birds of prey devouring a dead goat. Behind is a bush.

14. Translucent light brown sard scarab or scaraboid cut away to the line of the boring, in Metropolitan Museum, N. Y. (King Coll., Catal. No. 311).

A winged sphinx crouching down in front and holding a twig or flower in her fore-paws. Her hair is tied up in a large bunch at the top of her head. Cable border.

15. Carnelian scarab, in British Museum (Catal. No. 475).

A nude youth, perhaps Apollō, kneeling and playing a lyre. The short hair is done entirely with the drill, and the stomach muscles are shown by four bands. Cable border. Sixth century work.

16. Carnelian scarab (slightly calcined), in British Museum (Catal. No. 279).

A nude athlete leaning on a staff and with an oil-flask hanging from his arm. Sixth century work.

17. Bluish chalcedony cone, like Nos. 10 and 13, in Metropolitan Museum, New York (King Coll., Catal. No. 3).

Hermēs, unbearded and draped in a long Ionic tunic, with his caduceus over his shoulder and a flower in his hand. His feet are winged and his hair long behind. On his head

is a curious cap ornamented by a long feather that curves forward. An eagle or hawk stands before him. Ionic work of the sixth century.

18. Rock-crystal of long rectangular form, in Boston Museum (No. 01. 7594).

A bearded Tritōn wearing a cap or a fillet about his head and with his hair gathered in a bunch behind.

19. Carnelian scarab, in Hermitage Museum, St. Petersburg.

A nude, helmeted horseman riding with both legs on one side of his steed and carrying a spear. A round shield with a Gorgōn head on it hangs at his back. A dog is shown under the horse and, beneath that, a panther mask, full face. Cable border. Probably work of the transition period.

20. Chalcedony scarab or scaraboid cut down, from Tortosa, in Bibliothèque Nationale, Paris (Coll. Luynes, No. 262).

Hēraklēs kneeling, nude and unbearded, and carrying a lion over his shoulder. His club shows behind him, and under it is cut a Cypriote or Phœnician (?) sign, ♥. Sixth century work.

21. Carnelian scaraboid, from Cyprus, in Metropolitan Museum, New York (Cesnola Coll., No. 149).

A winged youth of the Erōs type carrying away in his flight a nude maiden who holds a lyre in her hand. The Museum authorities describe this picture as a representation of Boreas and Oreithyia, but Furtwängler, with, I think, sounder reason, argues that it signifies merely the conquest of Erōs over some maiden. One cannot but fancy how perfect a signet this would be for some poetess like Sappho. Line border. Sixth century work.

22. Rock-crystal scaraboid, in Boston Museum (No. 01, 7558).

Medousa, winged and with the hind half of a horse joined to her buttocks, seizing a lion. She wears a long garment. The face is shown full front and is of the same type as No. 10, above. A zigzag line fills the exergue. Cable border. Sixth century work.

23. Carnelian scarab, in British Museum (Catal. No. 290).

Seilēnos kneeling, nude, with a goblet in one hand and a jug in the other. He has horse's ears, a bald forehead, and long hair behind. Cable border. Sixth century work.

24. Light, translucent carnelian scarab, in Boston Museum (No. 98,729).

Hēraklēs, unbearded and with lion's skin, its mask ar-

ranged as a hood and the feet hanging down between his legs. His quiver hangs at his side, and his bow and arrows are in one hand while he raises his club in the other. Before him is a small nude figure with long hair and hands raised as if in supplication—possibly a worshipper. The exergue is filled with cross-lines. Border of joined drill-holes. Sixth century work.

25. Chalcedony scaraboid, from Thebes, in Boston Museum (No. 98,720).

A lion attacking a bull. In the left field a tortoise is shown and in the right a figure like a modified Oriental winged disk.

PLATE VI

GRÆCO-PHŒNICIAN GEMS

(These stones are bored through the longer axis except when otherwise stated.)

1. Carnelian scaraboid (unbored), in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 1081).

In the middle stands an Egyptian king wearing an apron and the crown of Upper and Lower Egypt with the uræus in front and carrying a sceptre. He is unbearded but shows the royal lock of hair. This marks him as the "Golden Horus, son of Ra," one of the titles of the Pharaohs. The figure is in the Egypto-Syrian style. On each side of him is a smaller figure in a long garment, more in the Persian style. These two are beardless and have their heads shaven like the Egyptian priests. Each raises a hand in the gesture of adoration. The picture shows a mingling of Egyptian and Persian elements. The workmanship is of the Phœnician art of the end of the sixth century. The exergue is filled with crossed lines. Furtwängler suggests, with much ingenuity and some reason, that this stone had its origin in the conquest of Egypt by Kambysēs, and that he is here represented as Pharaoh.

2. Rock-crystal scarab, in Bibliothèque Nationale, Paris (Coll. Luynes, No. 268).

Demonic figure in Egypto-Syrian style with four wings on his body and one on each heel. He wears an apron and the crown of Upper Egypt and carries in each hand a feather,

the symbol of victory in Egyptian art. The exergue is filled with crossed lines. The workmanship is akin to that of Greek art, and shows the precision of the second half of the sixth century.

3. Green jasper scarab, from Sardinia, in Berlin Museum (Catal. No. 104).

A demon kneeling on one knee, his upper half a lion, the lower a man with a lion's tail. He wears the Egyptian apron. Cable border.

4. Green jasper scarab, from Tamassos in Cyprus, found in a grave of the sixth century; in Berlin Museum (Catal. No. 102).

Besa shown in profile wearing a feather crown and contending with a lion which stands before him on its hind legs. Above it are a star and a sun resting on a crescent. The exergue is filled with cross-lines. Line border.

5. Green jasper scarab, from Tharros in Sardinia, in British Museum (Catal. No. 215).

A king (or god), bearded and with conical cap, his mantle falling over one leg, the other bare, striking with an Egyptian axe a kneeling naked figure, probably a demon, who seems to be trying to escape and raises his hands in supplication. The exergue is filled with cross-lines. Line border.

6. Green jasper scarab, from Tharros, in British Museum (Catal. No. 171).

Two negro masks joined together, back to back, by a third mask which is full-faced, grinning and wears a crown of feathers (?) (Besa?). These, however, may be meant for serpent-heads, in which case the face would be of Medousa. Below the neck are the fore-parts of two lions, a sheep's head, and a sparrow hawk, all joined together. Irregular cable border.

7. Green jasper scarab, from Tharros, in British Museum (Catal. No. 182).

A warrior marching and looking behind, as if at a pursuing enemy against whose attack he holds his shield on which is set a Seilēnos mask, while he thrusts backward with his spear. He wears greaves and a linen corselet. His thighs are clothed in some fashion indicated by transverse strokes. Cable border.

8. Green jasper scarab, from Tharros, in British Museum (Catal. No. 172).

Nude, winged figure running. The face is that of Besa and he wears a crown of three feathers. In his hands he brandishes two uræi, and two others proceed from his sides. The exergue is filled with cross-lines. Line border. Græco-Phœnician work with strong Egyptian influence.

9. Green jasper scarab, from Tharros, in British Museum (Catal. No. 196).

A bearded god, probably Bel-Khamon, seated on a throne which is flanked by sphinxes. Before him stands a blazing censer (?) and above is the winged globe. Exergue filled with cross-lines. Cable border. Græco-Phœnician work, with Egyptian influence.

10. Black and white banded agate scarab, in Berlin Museum (Catal. No. 100).

Besa with feather crown. The face and body are shown full front, the legs in profile, the mantle falling over one leg. Wild goats and uræi spring from his hands which are at his waist, while two lions hang down, held by the legs. Exergue filled with cross-lines. Græco-Phœnician work of the sixth century, with Egyptian influence.

11. Green jasper scarab, from Tharros, in British Museum (Catal. No. 218).

Seilēnos bearded, squatting, with a goblet in his hand. The head and hair with the long lock behind are those of Besa, and he has a horse's tail, like that of the Greek Seilēnos, though much longer. Cable border. Work of the sixth century.

12. Carnelian scarab, in British Museum (Catal. No. 229).

Besa, bearded, shown in profile, wearing the feather crown, his thighs draped, and with a uræus springing from his waist. He is stabbing a griffin which stands erect before him. Exergue filled with cross-lines. Cable border.

13. Green jasper scarab, in British Museum (Catal. No. 235).

Two lions attacking a bull which has transfixed one of them with one of his horns. Above hangs a lotos flower. Exergue filled with cross-lines. Cable border.

14. Carnelian scarab, in Boston Museum (No. 98, 738).

A lion resting in a swamp of lotos flowers which rise above him. Exergue filled with cross-lines.

GREEK-PERSIAN GEMS

(These stones are bored through the longer axis.)

15. Bluish chalcedony, right-angled stone, the top bevelled in five facets and the picture only on the bottom, in Berlin Museum (Catal. No. 185).

A combat with lances between a mounted Persian and an adversary on foot who carries a shield. The work is very careless and shows free use of the drill.

16. Bluish chalcedony scaraboid, in collection of W. Gedney Beatty, New York.

A boar running. Work of about 350 B. C.

17. Chalcedony scaraboid, from Sparta, in Berlin Museum (Catal. No. 188).

A Persian lion-griffin with wings bent forward. It has a goat's horn and eagle's hind legs.

18. Red and white agate rectangular stone with faceted top and engraved on all six faces, from the neighborhood of Bagdad.

(a) On the bottom, which is considerably damaged, a Persian horseman, horse and man shown full front but with defective foreshortening, spearing a boar which springs at him. The man is clothed entirely in a close fitting garment.

(b) On the top, a hawk, and on the four bevelled edges a running bear, a lizard, a fox sniffing at what seems to be a grasshopper, and a bushy tailed dog lying down.

Work of not later than 450 B. C.

19. Chalcedony scaraboid engraved on both sides, in Boston Museum (No. 03, 1013).

(a) On the convex side, a draped woman, with flowing head-dress, seated in a chair with a bird perched on her hand. Before her stands a dwarf.

(b) On the flat side, another seated woman, similarly dressed, playing a trigōnon or triangular lyre. Before her stands a dog with a bushy tail.

Fourth century work.

20. Bluish chalcedony scaraboid, in Metropolitan Museum, New York (King Coll., Catal. No. 304).

A stag sinking on one knee, as if wounded.

21. Rock-crystal scaraboid, from Constantinople, in Berlin Museum (Catal. No. 184).

A mounted hunter with a lance attacking two wild goats.

22. Chalcedony scaraboid, from Megalopolis, in Berlin Museum (Catal. No. 181).

A Persian woman in a trailing robe with long hanging sleeves. Her hair is dressed in a long braid tied at the end. She carries in one hand an alabastron and, in the other, a drinking-cup and a spoon. Fourth century work.

PLATE VII

GEMS OF THE BEST PERIOD OF GREEK ART

(These stones are bored through the longer axis except when otherwise stated.)

1. Bluish, light-clouded chalcedony scaraboid, from Kertsch, in Hermitage Museum, St. Petersburg.

A flying crane. Beneath, in two lines, is the inscription ΔΕΞΑΜΕΝΟΣ ΕΓΩΙΕ ΧΙΟΣ (Dexamenos the Chian made). Line border. This is, perhaps, the most important, as well as one of the most beautiful gems known.

2. Chalcedony scaraboid, from Cyprus, in Boston Museum (No. 1075, 86).

A lion killing a mule. Cable border. Work of second quarter of the fifth century.

3. Carnelian cone (chipped), the base oblong and cut slightly convex, in British Museum (Catal. No. 550).

A child, probably the young Dionysos, seated on the ground and reaching out for a bunch of grapes that hangs on a vine. Work of second half of the fifth century.

4. Carnelian, probably originally a scaraboid. Owner unknown. Described from former descriptions and a modern glass paste reproduction.

Erōs as a child, though the head seems older and he is very far from the later Cupid type. He is winged and rests on his knees and one hand. Behind him is the open shell from which, according to one tradition, he was fabled to have been born. Beneath is inscribed, ΦΡΥΓΙΛΛΟΣ (Phrygillos), doubtless the name of the artist, who has been identified with a Syracusan coin-designer of the second half of the fifth century. Cable border.

5. Chalcedony with brownish spots, apparently cut down from a scaraboid, in British Museum (Catal. No. 557).

A bearded centaur running with the skin of an animal

fastened about his neck and floating out behind him, while an arrow (of Hēraklēs?) pierces his back. Below his tail are the letters XI, probably the beginning of the owner's name. Line border. Art of the school of Dexamenos.

6. Bluish chalcedony scaraboid, from Greece, in Boston Museum (No. 10339. 5).

A griffin attacking a stag. Underneath is a conventional representation of rocks.

7. Brownish chalcedony scaraboid (slightly chipped), in collection of W. Gedney Beatty, New York.

A combined monster with the head and neck of a horned dragon, a beard, a mane, the wings of a grasshopper, and an insect's body.

8. Carnelian scaraboid, from Tarsos, in British Museum.

A youth, in a pointed, crested helmet and a cloak fluttering behind him, leaning forward with one foot raised to fasten his sandal.

9. Chalcedony scaraboid, from Kertsch, in Hermitage Museum, St. Petersburg.

A lion.

10. Carnelian scaraboid, from Crete, in Berlin Museum (Catal. No. 303).

A prancing horse.

11. Translucent carnelian scaraboid, from Kertsch, in Hermitage Museum, St. Petersburg.

A seated woman (Aphroditē?) in a long tunic and mantle leaning forward to kiss a nude, winged Erōs who embraces her. School of Dexamenos.

12. Bluish chalcedony scaraboid, from South Russia, in Hermitage Museum, St. Petersburg.

Artemis draped to the feet in a long tunic. The motive has the character of the Pheidian sculptures. In her right hand she holds a sacrificial dish, in her left, her bow. She wears a diadem of towers as does the Artemis on the coins of the Tauric Chersonesos.

13. Convex chalcedony ring-stone, from Aigion, in Berlin Museum (Catal. No. 177).

On the convex side, unbored, a nude, bearded Hēraklēs. His lion's skin is thrown over his left arm, in which hand he, also, carries his bow. In the right hand is his club. In the left upper field the owl of Athēna perches on his shoulder, indicating the protection of the goddess. Though a ring-stone

this gem is evidently work of the second quarter of the fifth century.

14. Rock-crystal scaraboid, in Ashmolean Museum, Oxford.

Pan, bearded and horned, seated on a rock and with a bird, perhaps a raven, perched on one hand. An example of the crude work of the best period.

15. Translucent scaraboid (stone unknown), from Kertsch, in Hermitage Museum, St. Petersburg.

Aphroditē fully draped and seated on a rock giving suck to Erōs, who stands, winged, at her knee. The perspective is admirably handled.

16. Chalcedony scaraboid, from Cyprus, in Metropolitan Museum, New York (Cesnola Coll., No. 142).

A bearded man in a long tunic and mantle seizing a maiden, also clothed in a tunic to her feet and wearing a hood, who is dropping a lighted torch. It probably represents Hadēs seizing Korē. Line border. Work of second quarter of the fifth century.

17. Chalcedony scaraboid, from South Russia, in Hermitage Museum, St. Petersburg.

A nude woman resting on her toes with knees sharply bent and removing or putting on her mantle as if before or after bathing. She wears a pearl necklace.

18. Translucent carnelian scarab, from Kertsch, in Hermitage Museum, St. Petersburg.

Head of a youth in a Phrygian cap, perhaps Paris. Curving around on part of the cap that falls over the neck are the letters ΓΕΡΑΑ (Perga), evidently the beginning of a name. Cable border.

PLATE VIII

GEMS OF THE BEST PERIOD OF GREEK ART (*concluded*)

(These stones are bored through the longer axis except when otherwise stated.)

1. Dark brown sard scaraboid, from Tanagra, in Berlin Museum (Catal. No. 302).

A bull sinking on one knee. Above is the ending of an inscription, ~ΔΟΞ, which Furtwängler considers the ending in the genitive of some artist's name, following a line of argument which, as I have set forth elsewhere, is to me un-

convincing. Ornate border of joined squares with central dots. Work of the middle of the fifth century.

2. Carnelian, pierced like a scaraboid, with convex picture surface and the back part cut off; from Asia Minor (?), in Berlin Museum (Catal. No. 328).

The two Dioskoroi represented as boys, both with mantles, kneeling and playing with knuckle-bones. One wears a fillet around his head. The other's hair is somewhat rumpled. To the left is a fish, and, above, a crux ansata. Below is a very unusual descriptive inscription: ΔΙΟΣΚΟΡΟΙ. Work of the middle of the fifth century.

3. Rock-crystal scaraboid (chipped), in Boston Museum (No. 01, 7545).

A bull stung by a gadfly and running or stumbling. Above is the inscription, ΘΕ — Λ, the break intervening, and down the side, in front, ΕΣΕ, facing the wrong way, as often happens. Several guesses as to the complete inscription have been hazarded. Cable border.

4. Rectangular, milky chalcedony, the top of the stone cut in three facets running lengthwise; from Greece, in Berlin Museum (Catal. No. 333).

On the base is a locust or grasshopper.

5. Banded agate barrel-shaped cylinder, with the picture side cut flat, from Greece, in Berlin Museum (Catal. No. 331).

A woman in a long tunic. Her head is turned back and she is combing out her long hair. Work of the second quarter of the fifth century.

6. Eye-agate scaraboid with the picture surface somewhat convex.

A seirēn wearing a peculiar head-dress and having the body and tail of a scorpion. Very crude Ionic work of the Asiatic mainland. The head-dress shows strong Oriental influence.

7. Mottled green plasma scaraboid, from Cyprus, in Metropolitan Museum, New York (Cesnola Coll., No. 242).

A youth in a crouching attitude wearing a hat with a brim and holding in his hand an object which may be meant for a conch-shell. Surface of stone with high polish; interior of intaglio, dull. The feet seem to have been worn away, possibly by hard repolishing of the stone in ancient times.

8. Mixed red and yellowish jasper ring-stone (somewhat chipped), unbored, from the neighborhood of Taormina, Sicily.

A beardless man, in a long robe and with one foot

raised, pouring water (or wine) from a top-shaped vessel. It evidently represents the closing ceremony of the Eleusinian Mysteries, when libations of water were poured east and west, with mystical formulæ, from two top-shaped vessels. This gem gives rise, as I have suggested in my introduction, to a most interesting speculation. From the subject it is highly probable that it was the signet of an Athenian, the Athenian expedition against Syracuse wintered in 414 B. C. at Naxos, just under Taormina, and the material is altogether in accord with that date though it is early for a flat ring-stone. The engraving is crude but, as we have set forth elsewhere, it has been too much the fashion to deny all poor work to good periods of art. Altogether I am strongly inclined to consider the gem the signet of a member of that ill-fated Sicilian expedition whose destruction paved the way for the fall of Athens.

9. Banded agate scaraboid, from Ithōmē, in British Museum (Catal. No. 480).

A female head wearing a diadem in front. Beneath is the inscription, ΕΟΞ (Ēōs), which gives us another example of a descriptive inscription, more understandable, perhaps, in the case of a head which would, otherwise, be pretty sure to fail of identification.

10. Carnelian scarab, in British Museum (Catal. No. 431).

Head of a youth wearing a pilos or pointed cap strung with a cord at top. Cable border. Work of the Pheidian school.

11. Carnelian ring-stone, unbored, in Berlin Museum (Catal. No. 347).

A naked negro slave asleep in a squatting position. The hair is done entirely with drill-holes. Drill-hole border. Apparently work of the earlier part of the epoch but showing a fair attempt at foreshortening.

12. Red jasper scaraboid with white streaks, from Greece, in Boston Museum (No. 98,716).

Danaë, in a long tunic, leaning against a couch and holding out her garment in both hands to catch the descending shower of gold. The head of the couch is decorated, and two pillows lie on it. Cable border. Work of the middle of the fifth century.

13. Yellowish brown chalcedony scarab, from Syracuse, in British Museum (Catal. No. 361).

Female head in full face with hair bound up in a flowing knot at the top. She wears ear-rings and a necklace of pendants. Cable border. Work of the second quarter of the fifth century.

14. Carnelian scarab, in British Museum (Catal. No. 291).

A horse rolling on its back. Cable border. Work of the second quarter of the fifth century.

15. Flat rectangular carnelian with convex back, from Athens, in Boston Museum (No. 95.85).

Ithyphallic bearded Herm of Hermēs with a modius-like head-dress. Beside it is a caduceus. Work of the latter half of the fifth century.

16. Carnelian scarab, from Kertsch, in Hermitage Museum, St. Petersburg.

A crouching, nude woman holding her garment before her as if surprised. She squats on a double ground-line, the lower one done with drill-holes. Cable border. The work seems akin to that of the school of Dexamenos.

17. Carnelian cylinder, cut like No. 5, above (somewhat calcined); in British Museum (Catal. No. 555).

A seated youth, with the lower half of his body draped, playing a trigōnon. Intaglio unpolished. Work of the school of Dexamenos but rather later.

18. Chalcedony scaraboid, from Larnaka, in Ashmolean Museum, Oxford.

A naked satyr dancing and carrying a thyrsos and a branch. Rather careless work.

19. Banded agate cylinder, flattened on the engraved side, from Greece, in Boston Museum (No. 98.721).

A crane standing on one foot. Beautiful work of the school of Dexamenos.

20. Chalcedony scaraboid, from Syria, in Ashmolean Museum, Oxford.

Aphroditē, nude to the hips, standing in a statuesque pose, with one hand resting on a low column. On the other perches a dove. Her hair is done with a few drill-holes. On the convex side of this scaraboid another design was cut in late imperial times. See Plate XXII, 9.

21. Chalcedony scaraboid, from Syria (chipped and calcined).

An incompleated work, probably intended to be a Pan. The horns seem pretty clear but the head and beard are only suggested, and the arms and other parts unfinished.

One arm is extended and the other raised as if to cast a javelin the line of which seems, also, to be faintly traced. The condition of both the stone and the work suggests that the latter was interrupted by some catastrophe involving fire which fell either upon the city or the house of the artist. The condition makes the attribution of the period rather uncertain but I have little doubt that the gem belongs here.

22. Agate (?) scaraboid, in British Museum (Catal. No. 478).

A naked satyr seizing and half raising from the ground a mainad who wears an Ionic tunic. In one hand she carries a thyrsos; the other arm is extended as if to keep her balance. Cable border. Work of about 450 B. C.

23. Brownish chalcedony scaraboid, from Lakonia, in Berlin Museum (Catal. No. 313).

Aphroditē, with mantle about her hips and legs, seated on a stool and balancing a rod on one finger. Work of the end of the fifth century or possibly a little later.

PLATE IX

GEMS OF THE FINISHED STYLES

(*The scaraboids on this plate are bored through the longer axis.*)

1. Carnelian ring-stone, in Berlin Museum (Catal. No. 349).

Philoktētēs, bearded and nude, seated, mournful, on a rock with the bow and quiver of Hēraklēs behind him.

2. Grayish white agate ring-stone (chipped), from Peloponnesos, in Berlin Museum (Catal. No. 346).

Head of a youth, his short hair bound with a fillet.

3. Carnelian ring-stone (somewhat chipped), in British Museum (Catal. No. 552).

Aphroditē, fully draped save for the right breast which is left bare and wearing a diadem and necklace, seated, with a nude, unwinged Erōs leaning against her.

4. Carnelian ring-stone, from Athens, in Berlin Museum (Catal. No. 351).

Erōs as a winged youth shooting his bow. Inscription, ΟΛΥΜΠΙΟΣ, the name of the artist. This Olympios is, doubtless, identical with the coin-designer of the same name of the Arkadian coinage of 370 B. C.

5. Brownish red sard ring-stone, in Berlin Museum (Catal. No. 354).

Unbearded Tritōn, both legs ending in fishes' tails, holding a trident in one hand and a rudder in the other. Beneath him are two dolphins. Cable border. Work of about Alexander's time.

6. Dull, light brownish chalcedony rectangular gem with faceted top, bored through the longer axis, from the theatre of Dionysos, Athens, in Berlin Museum (Catal. No. 334).

On the under side, a dancing Bacchantē with flowing drapery, the left breast bare, and a sphendonē or diadem on her head. In one hand she carries a thyrsos, in the other a sword.

7. Mottled jasper scaraboid, in Boston Museum (No. 01, 7539).

Odysseus, bearded and nude save for a cloak wrapped about one arm. He wears a pilos on his head and holds his sheathed sword. One foot rests on a rock, his elbow on the knee, the hand supporting his chin as if in thought. The cast shows a protuberance on the right stomach muscles which I presume is a chip in the stone.

8. Carnelian (broken and the lower right side incorrectly restored in gold); in British Museum (Catal. No. 554).

Mainad, in tunic and fawn's skin, holding a wreath in one hand and a thyrsos decorated with fillets in the other. In the unbroken stone she was, certainly, *not* kneeling on an altar.

9. Rock-crystal scaraboid, in Berlin Museum (Catal. No. 317).

Hēraklēs, beardless and nude save for a cloak on one arm, leaning on his club which rests on a rock and holding out his bow. Statuesque motive.

10. Bluish chalcedony scaraboid, in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 1093).

Astronomical design symbolizing the constellations of the Serpent and the Greater and Lesser Bears.

11. Chalcedony scaraboid sprinkled with yellow jasper, in Berlin Museum (Catal. No. 310).

A bull with lowered head.

12. Chalcedony scaraboid, in Berlin Museum (Catal. No. 319).

A female figure, with garment about her legs and a veil, seated on the base of a low column. Before her stands a winged Victory, also with garment about her legs, crowning

her with a wreath. The identity of the seated figure is uncertain.

13. Chalcedony scaraboid, in British Museum (Catal. No. 1161).

Nikē, with long wings and garment about her legs, hanging a sword on a trophy at the base of which rests a second shield. A double pointed dart stands beside it from which depends a pennant bearing the inscription, ONATA, adapted to its curves. This is held by Furtwängler and others to be the name of the artist, Onatas. Both gem and signature seem to me worse than doubtful. The whole design and the placing of the letters smack strongly of the eighteenth century forgers but I include it here on the authority of others and as an interesting example of what, in my opinion, an ancient gem should *not* be.

14. Dark red jasper scaraboid sprinkled with chalcedony, in Berlin Museum (Catal. No. 320).

An amphora with a pointed lid.

15. Rock-crystal scaraboid (chipped), from Sparta, in Berlin Museum (Catal. No. 314).

Aphroditē with mantle over one arm and about her hips and legs. In one hand she holds a mirror and with the other she is arranging her hair. The motive is like that of the Praxitelean Venus of Arles. It may possibly date from the end of the fifth century.

PLATE X

GEMS OF THE FINISHED STYLES (*concluded*)

(*These are all ring-stones except when otherwise stated.*)

1. Nicolo, in Berlin Museum (Catal. No. 355).

A nude, winged youth bearing a thunderbolt and with bristling hair (or a crown of rays). He has one hand on the shoulder of a smaller, nude youth beside him who carries what seems to be a thyrsos and, possibly, a bunch of grapes. These figures cannot be identified, though Furtwängler hazards a far guess that it may be Alkibiadēs under the protection of the Erōs armed with a thunderbolt, the device he bore on his shield. Though classed in this epoch by Furtwängler, I am inclined to place the gem much later. The material would bespeak for it a Græco-Roman origin.

2. Nicolo, in Berlin Museum (Catal. No. 341).

A horseman, in Scythian tunic, trousers, and cap, galloping over an antelope that has doubled on him. Cable border. This, also, may be Græco-Roman.

3. Black jasper, in Berlin Museum (Catal. No. 356).

Achelōs, with a winged Victory floating above. A similar figure is found on the coins of Neapolis and several other cities, and the gem is probably work of the South Italian Greeks.

4. Carnelian scarab, bored through, from Apulia, in British Museum (Catal. No. 423).

A man's and woman's hands clasped, the latter with a bracelet on the wrist. Inscription $\chi\alpha\iota\pi\epsilon\ \kappa\alpha\iota\ \xi\gamma$ (be thou happy). Cable border. A good wishes gift.

5. Carnelian, in Berlin Museum (Catal. No. 353).

A crane attacking a serpent.

6. Carnelian fragment, in Berlin Museum (Catal. No. 352).

Ganymēdēs being borne aloft by the eagle of Zeus.

7. Chalcedony scaraboid, bored through, in Boston Museum (No. 98.718).

A cow browsing on the leaves of a tree. The work may be of the fifth century.

8. Carnelian, in Berlin Museum (Catal. No. 359).

A griffin standing over a fallen stag and seizing its throat in his jaws. The griffin has pointed ears and a lion's mane.

9. Chalcedony (broken), in British Museum (Catal. No. 553).

A bearded warrior, in short tunic and corselet, stooping on one knee to seize a stone. A panther's skin covers one shoulder and arm, and he holds two javelins. The intaglio is unpolished.

10. Grayish chalcedony with light yellowish brown tone, in Berlin Museum (Catal. No. 350).

An actor, with a goat's skin about his loins, taking off a bearded satyr mask. Against his shoulder leans a thyrsos with fillets.

11. Carnelian scaraboid, bored through, from Asia, in Berlin Museum (Catal. No. 1010).

On the convex side is pictured a seated woman, fully draped, about to fasten or unfasten her sandal. Work of second half of the fourth century.

12. Carnelian, cut down from a scarab, in Berlin Museum (Catal. No. 300).

Kadmos, unbearded and nude save for the cloak wrapped about one arm, attacking with his sword the dragon which coils about a rock from which the water flows. A pitcher lies on the ground at the hero's feet. Cable border. South Italian Greek work, possibly of the fifth century.

13. Carnelian (broken), in Berlin Museum (Catal. No. 348).

A horseman, with a cloak floating from his shoulders, thrusting with his spear at some creature behind the rock over which his horse prances. Cable border. South Italian Greek work, perhaps of the fifth century, as the stomach muscles in three folds seem to indicate.

14. Carnelian scarab, bored through, in British Museum (Catal. No. 420).

A woman, with garment about her shoulders, seated on a rock and playing with a dog.

15. Carnelian, long rectangular stone, bored through and engraved on four sides (broken), in Berlin Museum (Catal. No. 337).

(a) and (b) Tripods.

(c) Apollō, nude save for a cloak hanging on his back, with hair high on his forehead and flowing down his neck. In one hand he holds a laurel bough, in the other a bowl.

(d) A youth, nude save for a cloak, holding a diskos (?) in both hands. Perhaps Hyakinthos.

16. Convex carnelian, bored through but found set solid in a ring; in Berlin Museum (Catal. No. 329).

A nude boy, with an amulet hanging from his breast, seated on the ground. Beneath him a hound pursues a stag and seizes it by the leg. Below these are a fawn and a goose.

17. Agate scarab (broken), in British Museum (Catal. No. 315).

Hēraklēs, bearded and nude, his club in his hand, one foot resting on a rock from which water flows from a lion-head spout. Cable border. South Italian Greek work.

18. Chalcedony scaraboid (chipped), in British Museum (Catal. No. 476).

A sphinx seated on her haunches.

19. Pale brownish sard (broken), in British Museum (Catal. No. 556).

A woman, fully draped, seated on a chair and reading a book. Before her a lyre rests on a pedestal on which is inscribed in very faint letters, ΕΡΩC (Erōs). Probably some poetess of love, like Sappho.

PLATE XI

ETRUSCAN SCARABS

(These stones are all bored through the longer axis except when otherwise stated. The inscriptions follow, generally, the reading in the impressions but where, as is not infrequently the case, the letters are scattered and read both ways, I have transcribed them from left to right. It is only material that the student should familiarize his eye with both orders of the letters, since, while Etruscan reads from right to left, their gem-cutters worked, sometimes with reference to the impression, sometimes with reference to the reading on the stone itself.)

1. Banded agate, in Hermitage Museum, St. Petersburg.

Athēna, walking. She wears a long, elaborate tunic and a helmet, and bears a spear and shield. Four serpents fill the field, two on each side. Cable border. Exergue filled with a cross-strokes design. Archaic work of the end of the sixth century, belonging to our first group.

2. Carnelian, in Boston Museum (No. 98,735).

A female figure with long tunic which she is holding up with one hand. In the other hand she carries a palm-branch. Cable border. Archaic work of the end of the sixth century, belonging to our first group.

3. Carnelian, from Civita Castellana, in collection of Mrs. Henry Draper, New York.

An elaborately draped figure wearing a helmet and carrying a spear. One raised hand holds up an end of the short mantle on a level with the head. Before her is an object somewhat resembling an altar set on a rock. Cable border. Archaic work of the end of the sixth century, belonging to our first group.

4. Carnelian, from Corneto, in British Museum (Catal. No. 272).

Achilleus, seated on a stool, mourning for the loss of Brisēis. A mantle represented by drill-holes is thrown around his hips. Inscribed $\Lambda\psi\psi\epsilon$ (Achle). Cable border. Style of the Greek transition period, belonging to our second group.

5. Carnelian, in British Museum (Catal. No. 302).

A bearded, nude hero, perhaps Paris, kneeling on one knee and stringing his bow. Border of joined drill-dots. Exergue filled, in part, by the cross-stroke design found on "1," in part

by parallel perpendicular lines. Foreshortening of one leg is attempted. Style of Greek transition period, belonging to our second group.

6. Carnelian, in British Museum (Catal. No. 276).

Hēraklēs, nude but for the lion's skin over his shoulders, attacking with raised club Kyknos, who, also nude and with helmet and shield, sinks backward under the blows. Inscribed ἩΡΑΚΛΗΣ (Hercle) and ΚΥΚΝΗΣ (Kukne). Border of joined drill-dots. Exergue filled with a very perfectly executed cross-stroke design. Style of Greek transition period, belonging to our second group.

7. Carnelian, in Hermitage Museum, St. Petersburg. For the scarab relief we here find the figure of a seirēn.

Ajax, bearded and equipped with helmet, greaves, and an elaborately ornamented corselet with scalloped skirt, resting on one knee and bearing on his shoulder the naked body of the dead Achilles. Before them runs a small, nude, winged figure, doubtless intended to symbolize the spirit of the dead hero. Inscribed ΑΙΒΑΣ (Aivas) and ΑΧΕΛΕΥΣ (Achele). Cable border. Exergue filled with crossed horizontal and perpendicular lines. Style of Greek transition period, belonging to our second group.

8. Carnelian, in British Museum (Catal. No. 472). For the scarab relief is substituted a kneeling female figure with wings.

An unbearded hero, with helmet, greaves, and richly ornamented and jewelled corselet. He holds a shield resting on the ground before him and is giving a visored helmet to a youth who, with a long cloak wrapped about him and a lance in his hand, reaches out to receive it. Perhaps it is Achilles lending his arms to Patroklos. Cable border. Exergue filled with the cross-stroke design. Greek transition style, belonging to our second group.

9. Sardonyx of three layers, in British Museum (Catal. No. 473). For the scarab relief is substituted a figure of a negro slave, asleep in a squatting attitude, much like the motive of the intaglio shown Plate VIII, 10.

Kapaneus, nude and beardless, with helmet, shield, and sword that drops from his hand, sinking on one knee while the thunderbolt strikes the back of his neck. Border of joined drill-dots. Greek transition style, belonging to our second group.

10. Carnelian, in Hermitage Museum, St. Petersburg.

A lion crouching on its forequarters with lashing tail. Cable border. Belongs to our second group.

11. Carnelian, in Hermitage Museum, St. Petersburg.

Thēseus, seated on a stool, pondering or mourning, with a mantle about his hips. The motive is absolutely similar to "4" above, and the inscription, $\Xi\zeta\Xi\odot$ (These), may be one of the arbitrary flights of Etruscan fancy in the matter of describing the subjects on their gems. Cable border. Greek transition style, belonging to our second group.

12. Carnelian, cut down from a scarab, but showing no sign of the boring, in Berlin Museum (Catal. No. 195).

Tydeus, nude and unbearded, leaning over and scraping his leg with a strigil. The inscription, $\mathfrak{Z}\tau\upsilon\tau$ (Tute), is the only indication of the artist's intent to identify the figure. Cable border. Greek transition style, belonging to our second group.

13. Carnelian, with a most ornate and highly finished scarab relief. Cut in two along the line of the boring; in Berlin Museum (Catal. No. 194).

Five heroes, all unbearded, are shown seated on stools or standing on a horizontal ground-line. The inscription tells the subject: a council of leaders at the siege of Thebes. In the middle sits Amphiarios, a mantle, indicated by drill-holes, about his hips and thighs and a lance in his hand, with the inscription, $\mathfrak{Z}\odot\alpha\eta\iota\omega\mu\alpha$ (Amphitiare). Opposite sits Polyneikēs, with cloak falling from his shoulders about his legs, his head resting on his hand. Inscription, $\mathfrak{Z}\phi\upsilon\lambda\nu\iota\kappa\epsilon$ (Phulnice), and, behind Amphiarios, Parthenopaïos, wrapped in his mantle, his hands on his knees, with the inscription, $\Gamma\alpha\delta\odot\alpha\eta\alpha\Gamma\alpha\epsilon\varsigma$ (Parthanapaes). The heads of all these are bare. Between the last named and Amphiarios stands Adrastus with helmet, spear, and a Mycenæan shield. Inscription, $\alpha\tau\delta\epsilon\varsigma\odot\epsilon$ (Atresthe), and, in the background over Polyneikēs, Tydeus, in helmet and corselet and holding a spear, with the inscription, $\mathfrak{Z}\tau\upsilon\tau$ (Tute). Border of joined drill-dots. A very fine work of our second group and unique in the number of figures represented.

14. Carnelian, from Corneto, in British Museum (Catal. No. 278).

Perseus, with a winged petasos and a short cloak falling back from his shoulders, cutting off the head of Medousa, who, fully draped in Ionic archaic style, sinks on her knees before him. The head has nothing of the Medousa type

about it but she holds a serpent in one hand. Both figures rest on a double ground-line with a sort of leaf pattern between. Border of joined drill-dots. The work probably belongs to our second group, though the picturesque subject points to a rather later date, in which case it should be classed as an imitation of an earlier style.

15. Cross-banded Sardonyx, in British Museum (Catal. No. 281).

Achilleus, beardless, in full panoply, with corselet and helmet highly ornamented and a short mantle draped over one arm, holding up Penthesileia, who, wounded, sinks on her knees with drooping head. She wears a helmet, a linen (?) corselet with a short skirt of lighter texture, and high shoes. A round shield is on her arm, and her double-headed axe has dropped from her hand. Running over one shoulder and obliquely across her breast is what may be meant for a broad sword-belt. Achilleus' spear stands upright by his side. Cable border. Exergue filled with the cross-line design. Fine archaic work belonging, stylistically, to our second group but picturesque, showing quite successful foreshortening, and, perhaps, of as late manufacture as the latter part of the fifth century.

16. Cross-banded sardonyx, in Boston Museum (No. 95, 77).

Two nude warriors with helmets and shields, one bearded, the other beardless, supporting a third who is kneeling, wounded, on the ground. He, also, is bearded. Cable border. The work is archaic in style but, like "15," is, perhaps, of later date than 450 B. C.

17. Carnelian, in British Museum (Catal. No. 327).

A beardless man, wrapped in a long cloak and seated on a stool, from whom a young hero, also beardless and armed with a helmet, shield, and spear, is parting, turning his head as he goes as if to bid farewell. Both rest on a ground-line. Inscription, ΛΑΟΔ (Laor). The subject is uncertain. It may be Patroklos parting from Achilleus. Cable border. The work is in the severe Greek style strongly Etruscanized and, probably, belongs along the middle of the fifth century.

18. Chalcedony, in British Museum (Catal. No. 335).

A nude, bearded man, perhaps an athlete, leaning on a staff or spear and with a round vessel (for oil?) hanging on his arm. He also holds what may be meant for a strigil. Cable border. The work lacks polish and, also, the ornamented line about the base of the beetle, as do the Greek

scarabs, but the style is strongly that of the Etruscanized archaic Greek. Probably work of along the middle of the fifth century.

19. Carnelian, in British Museum (Catal. No. 255).

Nude, beardless youth, bending forward with a hare on his arm which he seems to have picked up from beside a bush which stands before him. In the other hand he holds a pedum. Probably a rural genre scene, rare on Etruscan scarabs. Work of the middle of the fifth century and kindred to our second group.

20. Banded agate, in British Museum (Catal. No. 269).

Kapaneus, nude but for a short mantle and with a shield on his arm, sinking down on one knee as the thunderbolt strikes his head. Shows attempted foreshortening. Cable border. Akin to our second group but dating, probably, from not earlier than 450 B. C.

21. Banded agate, in British Museum (Catal. No. 298).

Hēraklēs, unbearded, with his lion's skin about his shoulders and one hand resting on his club, seated upon his own self-erected funeral pyre. The hair is done with drill-holes. Cable border. Akin to second group but much more free and dating, probably, from not earlier than 450 B. C.

22. Agate, from Chiusi, in British Museum (Catal. No. 354).

A warrior, helmetless and with streaming hair, but with corselet, shield, and sword, rushing over the naked body of a fallen foe and turning his head to look backward. Cable border. It is very difficult to date this gem at all accurately. It might fall anywhere between 450 and 350 B. C.

23. Banded sardonyx, in British Museum (Catal. No. 353).

A woman, in a long tunic and with a mantle about her hips, seated on a stool with elbow on knee and head resting on her hand. She seems to have butterfly's wings on her shoulders, and her head is shown in full face. Before her, in the field, is a bow. Though much like some Pēnelopē types, it is probably a Psychē—surely so if the wings be meant for butterfly's. In that case the bow is that of Erōs. The date of this gem is also difficult to fix but it is probably of along 450 B. C.

24. Carnelian, in Hermitage Museum, St. Petersburg.

A winged female figure, draped like No. 23, seated on a stool and holding in her right hand a small winged demon who carries an indistinguishable object. At her feet

is a caduceus. The subject cannot be surely identified but the presence of the caduceus suggests that the small figure may be a soul, perhaps that of Memnōn in the hand of his mother, Ēōs. Cable border. The work looks like a fourth century attempt to imitate the classical style.

PLATE XII

ETRUSCAN SCARABS (*continued*)

(*These stones are bored through the longer axis except when otherwise stated.*)

1. Carnelian, cut down from a scarab, the boring showing on the back, in Berlin Museum (Catal. No. 203).

Hermēs, unbearded, nude, and bending over, his petasos hanging at the back of his neck. He holds, in one hand, his caduceus and, in the other, a small, nude figure that has what looks like a small bough in one hand and raises the other as if in adoration. Evidently it symbolizes a soul which Hermēs carries, as "Psychopompos." Cable border. The body, head, and hair show the free influence breaking through the archaic forms.

2. Sardonyx, in British Museum (Catal. No. 320).

Hermēs Psychopompos, unbearded, nude, and standing erect, his petasos hanging at his back and his caduceus in one hand, while, on the other arm, he carries a small, nude eidolon figure of a soul. At his feet is a conventional representation of water—the stream of Acherōn. Cable border. Work like No. 1, of our third group.

3. Carnelian, from Vulci, in Berlin Museum (Catal. No. 204).

Tydeus, nude and bearded, either running or falling wounded—the artist's intention is not very clear. On his arm he bears his shield, in the other hand his sword, while his helmet has fallen off and lies at his feet. Inscription, 3ṛVṛ (Tute). Cable border. Third group.

4. Banded agate, in collection W. Gedney Beatty, New York.

This gem is a veritable puzzle from every standpoint. Hēraklēs stands nude, his club beside him and his lion's skin hanging over it while, with the other hand, he seems to hold an upright nude figure whose buttocks would suggest a female and which lacks head, shoulders, and arms. Above

it are six small dots, but they are not so placed as to be possible indications of an incompleted figure nor does the sharp line of demarcation where the body ends leave such a supposition reasonable. I know of no Hēraklēs myth that will explain this subject. Cable border. In the matter of classification and period this scarab is also confusing. The full softness of the figures and the head and face of the Hēraklēs would carry it into the fourth century, but the treatment of his legs, one in profile and one full front, and the broad, square shoulders are archaic as is, also, the absolute lack of polish in the intaglio. Altogether, I have put it here in class three by way of compromise but shall quarrel with no one who disputes me. I may add that the scarab is unquestionably genuine, since the opposite hypothesis might occur to some who have not studied the stone itself.

5. Carnelian, in British Museum (Catal. No. 314).

Hermēs and Hēraklēs talking together. The former has a cloak thrown over his shoulders, his caduceus in one hand and his petasos hanging from the other. He wears his winged sandals. Hēraklēs has his lion's skin, bow, and quiver, while his club is at his feet. Beautiful border of s curves with dots between. Exergue filled with the conventional cross-line design. Work of our third group.

6. Carnelian, in British Museum (Catal. No. 324).

A nude demon, with large wings, holding a garment of some sort behind him with both hands. Cable border. Third group.

7. Carnelian, in British Museum (Catal. No. 359).

A female head with hair elaborately dressed. Cable border. A rare subject in Etruscan art. Class three, for lack of better attribution.

8. Banded agate, in British Museum (Catal. No. 313).

Hermēs, bearded and nude, his petasos hanging at the back of his neck and his caduceus in his hand. Cable border. The legs only show archaic influence, and the whole work is finely detailed. Third group.

9. Carnelian, in Berlin Museum (Catal. No. 201).

Perseus, nude and beardless, carrying his curved sword or harpē in one hand and the head of Medousa in the other. Blood drops from both. Over one arm is slung a sort of wallet and he wears the winged sandals of Hermēs. The head of Medousa does not show conventional characteristics.

Inscription, $\Phi E D \varsigma E$ (Pherse). Cable border. Coarse work of group three.

10. Carnelian, in Boston Museum (No. 98.717).

Hermēs, unbearded, a petasos on his head and his cloak over his shoulders, kneeling with his caduceus in one hand and a necklace in the other. Cable border. Third group.

11. Carnelian, in Berlin Museum (Catal. No. 202).

Kastōr, nude and kneeling, supporting himself with one hand while, with the other, he holds the back of his neck, as if wounded. It evidently pictures the death of Kastōr. Inscription, $\chi \nu \tau \iota \varsigma \Lambda \chi$ (Castur). Cable border. The archaic influence shows little or none. Work of about 450 B. C. or somewhat later. Fourth group.

12. Carnelian, in Berlin Museum (Catal. No. 367).

Youthful, unbearded Hēraklēs seated on a rock in an attitude of meditation, his club resting on another rock before him from which a fountain springs. Cable border. Fine Etruscan work of the fourth group. It shows no stiffness and dates along the end of the fifth century.

13. Carnelian, in Berlin Museum (Catal. No. 368).

Seilēnos, nude, seated on two amphoras which are equipped with a mast and sail. Beneath is water. Cable border. Work of the latter half of fifth century. Fourth group.

14. Black and white banded agate, in British Museum (Catal. No. 297).

Paris, nude but for a cloak which falls from his shoulders, bending to draw an arrow from his quiver while he holds his bow in his hand. Inscription, $\chi \iota \chi \alpha \chi$ (Paris). Cable border. Fine, free work of early second half of fifth century. Fourth group.

15. Carnelian, from Chiusi, in British Museum (Catal. No. 312).

Ajax, nude and beardless, throwing himself on his sword which is set against a rock. Blood drops from the wound. Border of drill-dots. Fourth group.

16. Brownish chalcedony, in British Museum (Catal. No. 334).

Ixiōn, nude and bearded, standing bound to his wheel. Inscription, $\iota \chi \varsigma \iota \nu$ (Ichsiun). It may be noted that the Greek sigma is used here. Cable border. Fourth group, but showing severe treatment of the legs and considerable stiffness.

17. Carnelian, in British Museum (Catal. No. 308).

Tantalos, bearded and with a cloak over his shoulders and following the line of his back, bending forward and trying to reach water flowing over a rock. Cable border. Free work of second half of the fifth century. Fourth group.

18. Carnelian, in British Museum (Catal. No. 498).

Hyakinthos, nude and beardless, bending over a diskos which lies on the ground, while the blood drops from his wounded head. Inscription, $\alpha\upsilon\alpha$ (Luce), perhaps for Lukeios, an epithet of Apollō as god of the palaistra, at whose hands Hyakinthos received his death-wound. Cable border. Second half of the fifth century. Fourth group.

19. Chalcedony scarab with the back cut away, from Chiusi, in British Museum (Catal. No. 433).

Hermēs Psychopompos with winged hat and sandals, and cloak following the line of his back. He holds his caduceus and leans over, beckoning to a bearded head which emerges from a jar. A type picture of raising a soul from the underworld. Cable border. Free work of second half of fifth century. Fourth group.

20. Carnelian, from Toscanella, in Boston Museum (No. 98.730).

Aktaiōn, with a short beard, his mantle about his hips and thrown over one arm, rising from a chair of Attic shape and playing with a dog that he has on leash. Below him is a rock and, above, water issuing from a lion-head fountain-spout. Behind the stream is a star-like object which Furtwängler thinks is a pomegranate. Inscription, $\alpha\tau\alpha\iota\upsilon\nu$ (Ataiun). Second half of fifth century. Fourth group.

21. Carnelian, in Boston Museum (No. 98,773).

An unbearded, nude man, probably one of the giants, with a shield on his left arm over which, also, a cloak is draped, rushing upward over rocky ground and about to hurl a huge stone. His spear has fallen from his hands. Inscription, $\mu\epsilon\alpha\varsigma$ (Meas). Cable border. Free work of about 400 B. C.

22. Carnelian cut down from a scarab, in Berlin Museum (Catal. No. 205).

A nude, beardless youth, doubtless Kadmos, with sword and shield, examining the ground before him where water is running from a rock. A water-jar stands between his feet. Cable border. A fourth century work with an affectation of earlier hair treatment and sharpness.

23. Carnelian, from Chiusi, in British Museum (Catal. No. 316).

Thēseus (or Hēraklēs), his cloak about his shoulders and his sheathed sword in his left hand while he swings his club. Near him runs a wild boar (if Hēraklēs, the Erymanthian boar). Cable border. Free fourth century work with no trace of archaism.

24. Carnelian, in British Museum (Catal. No. 374).

A nude figure standing with his arms around another who, with a garment about the hips, seems to be seated on a couch. Cable border. Ordinary work of the fourth century B. C.

25. Carnelian, in British Museum (Catal. No. 438).

Erōs, as a winged youth, kneeling with his hands bound behind his back. Cable border. Good, free work of the fourth century.

PLATE XIII

ETRUSCAN SCARABS (*concluded*)

(*These stones are bored through the longer axis except when otherwise stated.*)

1. Carnelian, in Berlin Museum (Catal. No. 264).

Two stags, the bodies joined together and having one head. Line border. Done entirely with the round drill.

2. Carnelian, in Berlin Museum (Catal. No. 217).

Hēraklēs, nude and running with bent knee action. He carries his club and, also, two amphoras bound together with ropes. Cable border. Done with round drill.

3. Carnelian, from Perugia, in Berlin Museum (Catal. No. 214).

Horseman on a galloping horse, nude and carrying shield. He turns backward as if guarding against the blow of a pursuer. Cable border. Done with round drill.

4. Carnelian, in British Museum (Catal. No. 365).

A chariot race with six cars arranged around the outside of the design. In a central cartouch three judges with staffs are seated on stools. Cable border. Done with round drill.

5. Carnelian, in British Museum (Catal. No. 381).

Hēraklēs, nude, killing the Hydra with his club. Beneath him is a rock. Cable border. Done with round drill.

6. Carnelian, in Berlin Museum (Catal. No. 237).

A Tritōn-like sea-demon. Beneath him is a fish. Line border. Done with round drill.

7. Carnelian, in Berlin Museum (Catal. No. 266).
The foreparts of two dogs (?) arranged reversely and joined together by one body. Line border. Done with round drill.
8. Carnelian, in Berlin Museum (Catal. No. 227).
Seilēnos pouring water or wine from an amphora. No border. Done with round drill.
9. Light greenish plasma scaraboid, in British Museum (Catal. No. 400).
A nude man, perhaps Hēraklēs, bending over and holding an animal. If Hēraklēs, the object behind him is meant for a club. Above are two drill-holes, as if to fill the space. Cable border. The style is distinctly of the Etruscan drill-work type but the unusual material and shape may point to a more southern provenance, perhaps Samnium.
10. Carnelian, in Berlin Museum (Catal. No. 374).
A haruspex, in a long mantle and cap, walking with a staff and holding in his hand what seems to be the entrails of an animal. Inscription, $\gamma\iota\tau\alpha\nu$ (Natis). Line border. Done with round drill, the clothes finished with a few lines.
11. Carnelian, in Berlin Museum (Catal. No. 222).
A nude winged demon bending over to pick up or put down an urn. Joined to the nape of his neck is a curious ball-like object. Cable border. Done with round drill, the wings finished with the wheel.
12. Carnelian, in Berlin Museum (Catal. No. 231).
Hēraklēs, unbearded and nude, his club in his hand, seated, pondering, on an amphora which rests on a raft supported by three amphoras. Before him is a bush. Cable border. Blocked in with round drill but the head and hair finished with the wheel, and the body muscles well worked out.
13. Carnelian, in British Museum (Catal. No. 328).
Hēraklēs, nude. The bow and club have fallen from his hands and he is being lifted by two female (?) figures in long tunics and mantles. Probably a representation of the hero's journey to Heaven. Cable border. Done with round drill, the clothes finished with the wheel.
14. Carnelian, in British Museum (Catal. No. 330).
A nude winged demon flying and holding two indefinite objects in his hands. In the British Museum catalogue it is called Daidalos and the objects, a saw and an adze (?).

Furtwängler calls the adze a *pedum* and the saw a *snare* (?). Cable border. Done with round drill, the head and wings finished with the wheel.

15. Carnelian, in Berlin Museum (Catal. No. 223).

A winged female (?) demon in a long tunic, probably *Ēōs*, if male, *Thanatos*, holding an urn from which water seems to be flowing. Behind her is a serpent and, behind her head, an undistinguishable object. Cable border. Done with round drill, the tunic and wings finished with the wheel.

16. Carnelian, in British Museum (Catal. No. 377).

A harpyesque or *seirēn*-like demon, with a bird's body and feet joined to which are a woman's body and head. She holds a sword in her hand, and her hair is drawn up in a knot at the top of the head. Done with round drill but finished quite carefully with sharp wheel strokes.

17. Carnelian scarab, from Cervetri, in collection of Mrs. Henry Draper, New York.

A *seirēn* with spread wings. Cable border. Done with round drill, the tail and wing-feathers with sharp wheel strokes.

18. Carnelian, in Berlin Museum (Catal. No. 370).

A nude youth seated on a rock and holding an amphora on his knees. Behind him is a serpent. According to Gerhard, *Polyphēmos* with the pitcher of wine given him by *Odysseus*; a far-fetched attribution. Cable border. Done with round drill, the hair finished with the wheel.

19. Carnelian, cut down from scarab, in Berlin Museum (Catal. No. 371).

Hermēs, beardless, wearing a *petasos* and with a cloak hanging from his shoulders, holding a human-headed swan, doubtless meant to symbolize a soul, by the head. There has been a cable border which is also cut away, leaving only a few traces. Done with round drill and finished with a few strokes of the wheel.

20. Carnelian, in British Museum (Catal. No. 274).

Achilleus, nude, his shield on his arm, sinking back, wounded, with the arrow of *Paris* in his foot. His hair is done in a roll with a long, feather-like knot flowing out behind. Cable border. Good work of the fourth century, blocked in with the drill but finely finished with a sharp cutting instrument. An evident imitation of the earlier styles.

21. Carnelian, in British Museum (Catal. No. 277).

A bearded, nude hero wearing a helmet and carrying a bow and club. He is kneeling on one knee as a serpent bites his foot. Over one shoulder is a star. It is, undoubtedly, Philoktētēs bearing the arms of Hēraklēs, whose apotheosis may be symbolized by the star. Cable border. Fine work of the fourth century, blocked in with the drill and finished with sharp wheel strokes. Also an imitation of the earlier styles.

22. Carnelian, in Berlin Museum (Catal. No. 208).

A demon with a man's body and a bull's head, perhaps the Minōtaur, carrying a bough (?) in one hand and a round vessel with a thong handle in the other. Cable border. Fourth century work, done, for the most part, with the drill but the details are well worked out and the gem is evidently an affectation of the earlier styles.

23. Carnelian cut down from a scarab, in British Museum (Catal. No. 444).

The Campanian man-headed bull (Achelōos). In the field are a plant and a star. In the exergue is a serpent. The cast seems to show traces of a cable border that has been cut away. Fourth century drill-work finished with the wheel. The inscription, ΓΕΛΑΣ, in Greek letters, is a modern forgery.

24. Carnelian, in British Museum (Catal. No. 275).

Achilleus (?), nude and bearing a shield while he bends, with one foot raised on a rock, to pick up a helmet and spear. Cable border. Fourth century work blocked in with drill and finished with the wheel in imitation of older styles. The four Greek letters in the field are a meaningless modern forgery.

PLATE XIV

HELLENISTIC GEMS

(These are ring-stones except when otherwise stated.)

1. Carnelian of a beautiful deep red tint, in Hermitage Museum, St. Petersburg.

Full-length, nude likeness of Alexander the Great with the attributes of Zeus. In one hand he holds the thunderbolt and in the other his sheathed sword with the Aegis thrown over it. His shield rests on the ground, and before him stands an eagle. The head is of the Alexander type, and there was, at Ephesos, a full-length painting of Alexander as Zeus, done by Apellēs, to which this gem evidently stands in close relationship. The inscription, ΝΕΙCOY, seems to be later work, probably of imperial times, and, if so, is some more recent owner's name in the genitive. The gem is large for a ring-stone but large rings were sometimes worn and the inscription seems to indicate that it was used, in later times, at least, as a signet.

2. Convex carnelian, in British Museum (Catal. No. 661).

Athēna wearing a long tunic and a helmet. In one hand she holds a thunderbolt, in the other her spear. An ornamented scarf is thrown over her left arm and seems to be connected with some object behind her. The figure has been described as leaning against a pillar which I do not find in evidence. Statuesque motive sketchily carried out.

3. Convex, dark brown, shaded agate (somewhat broken), in Metropolitan Museum, New York (King Coll., Catal. No. 207).

A nude female figure, shown in full front, leaning on a low column with a scarf over one arm and floating across her thigh. In the other hand she holds a distaff. She also wears a necklace, bracelets, and ear-rings. It would seem to be intended for that rare subject, one of the Fates, probably Klōthō.

4. Carnelian (somewhat broken), from Cyprus, in Berlin Museum (Catal. No. 1042).

Artemis in a long tunic girt in at the waist. In one hand she holds her bow and, with the other, reaches over her shoulder to draw an arrow from her quiver. Sketchy work.

5. Convex peridot, in Metropolitan Museum, New York (King Coll., Catal. No. 118).

Apollō, nude save for his mantle thrown over one arm, leaning on a low column against which his lyre rests. In one hand he holds his bow. Statuesque motive.

6. Convex carnelian, in Hermitage Museum, St. Petersburg.

Dionysos, unbearded and nude but for a scarf over his arm, shown full front, leaning on a low column. In one hand he holds a thyrsos. Fillets hang from his head.

7. Slightly convex carnelian; owner unknown.

A nude female figure with necklace, bracelets, and anklets, leaning against a lavatory basin set on a small column. Her arms are raised as if arranging her hair. Inscription, ΣΚΟΠΑ, held by Furtwängler to be the signature of the artist, Skopas, whose identity I have commented on in the text. Certainly the signature here, if it be a signature, does not comply with the standard of unobtrusiveness.

8. Strongly convex hyacinth, in British Museum (Catal. No. 729).

Apollō in a pose following a Praxitelean motive, the lower part of his body draped. He seems to be tuning his lyre which he rests on the head of a small, draped female figure, perhaps one of the Hours, who holds a patera in her hand.

9. Four-sided rectangular amethyst, bored through the longer axis, in British Museum (Catal. No. 563).

On each of the four sides is engraved a dancing mainad in flowing drapery. The second of these holds a serpent in one hand. This gem may be Augustan work.

10. Strongly convex garnet, in Hermitage Museum, St. Petersburg.

Odysseus, bearded, wearing the characteristic pilos, and nude but for a suggestion of drapery over one arm. One foot is raised, resting on a rock, and he holds a rudder in his hand.

11. Strongly convex hyacinth, in British Museum (Catal. No. 815).

Aphroditē standing with a mantle draped about her legs and holding the child Erōs by the wing. He is playing a large lyre and seems to be trying to escape. The inscription, ΑΑΑΙΩΝΟ□, is modern and was probably cut in the eighteenth century.

12. Strongly convex garnet, in Hermitage Museum, St. Petersburg.

Agathē-Tychē, draped about the legs, with one foot raised on a rock and holding a large cornucopia.

13. Convex carnelian, perhaps a ring-stone, in Hermitage Museum, St. Petersburg.

Dionysos, unbearded, in a statuesque pose, leaning on a low column. His legs are draped and a mantle is thrown over one arm. In one hand he holds a thyrsos adorned with long streamers and, in the other, a kantharos. A panther stands at his feet. This gem has been placed in Augustan times, but its character is markedly Hellenistic and, whatever the date of the work, it belongs stylistically and, probably, actually in this epoch.

14. Deep red, convex carnelian, in British Museum (Catal. No. 649).

Athēna, fully draped and leaning on her shield. She holds a helmet in one hand and a spear rests across her arm. The motive is much like that of the peaceful Athēna of Pheidias. The inscription, ONECAC ΕΠΟ, in two lines, has, after some hesitation, been definitely accepted by Furtwängler as the signature of Onēsas. The gem itself is unquestionably ancient.

15. Strongly convex brown sard, in Berlin Museum (Catal. No. 1037).

A youthful and rather effeminate-looking god with mantle over the arms and about the legs and leaning on a low column. A fillet binds his hair. The lack of attributes makes the identity doubtful but the type is that of Apollō or Dionysos.

PLATE XV

HELLENISTIC GEMS (*continued*)

(*These are all ring-stones.*)

1. Carnelian, in Berlin Museum (Catal. No. 6441).

A youth and two girls partially draped and reclining on couches about a small, round table. One of the girls holds a wine cup, and the attitudes of all express the hilarity of the occasion. A figure, evidently a servant, fantastically made up with wings, as if in some character, brings a dish of fruit. At the other side stands a tall lamp.

2. Carnelian, in Berlin Museum (Catal. No. 6458).

An ichneumon approaching an erect cobra in a lotos swamp. Probably the work of some Alexandrian gem-engraver.

3. Carnelian, in Berlin Museum (Catal. No. 6437).

Erōs bending over and looking into a large krater.

4. Carnelian, in Berlin Museum (Catal. No. 6440).

Aphroditē, draped about the legs, leaning against a low column while, beside her, Erōs wrestles with an unwinged boy. On the other side stands an ephēbos with a wreath and a palm-branch. Beyond the wrestlers is a bearded Herm of peculiar shape and, behind it, a branch with fruit (?) hanging on it. Sketchy work.

5. Convex topaz, in Berlin Museum (Catal. No. 1102).

A girl, in fluttering drapery, kneeling on a rock and bending forward to lay a mask before an ithyphallic Herm. Sketchy work.

6. Amethyst, convex on both sides, cut in two pieces and showing that it was originally bored through; in Berlin Museum (Catal. No. 1100).

On one side, a woman, fully draped, leading a horse beneath which is a serpent. (The picture on the other side is not figured here.)

7. Convex topaz, in Berlin Museum (Catal. No. 1101).

A sleeping woman, with garment draped about her legs, behind whom stands an Erōs with large wings.

8. Convex rock-crystal, in Berlin Museum (Catal. No. 3064).

A fully-draped woman, probably Aphroditē, holding an undistinguishable object in one hand. Before her stands a small Erōs, and behind is a decorated column on which is a nude statue of Aphroditē. Sketchy work.

9. Convex garnet, in Berlin Museum (Catal. No. 1127).

Helmet with high, flowing crest and a large horn projecting from the front. Its peculiar form resembles types on the coins of Antiochos VI of Syria.

10. Chalcedony, from Smyrna, in Berlin Museum (Catal. No. 6955).

Head and shoulders of the Nērēid, Galēnē, swimming with hair floating out behind her.

11. Undescribed stone, in Hermitage Museum, St. Petersburg.

Head of Isis with Egyptian head-dress and long ringlets arranged in the Libyan fashion.

12. Convex hyacinth, in Berlin Museum (Catal. No. 1040).

Aphroditē, a garment draped about her legs, with one hand resting on a low column behind her.

13. Carnelian cut in octagonal shape at some later time, from Asia Minor.

A warrior, in full panoply, kneeling on one knee before a low column on which is a comedy mask to which he is offer-

ing a wreath. His shield and spear rest against the column. Evidently an offering to Dionysos in recognition of aid in battle.

14. Convex hyacinth (broken), in British Museum (Catal. No. 1368).

A nude youth with one foot raised as if to bind his sandal. The inscription, ΠΙΔΙΑΣ ΕΡΟΙ (*Φειδίας έποίησε*), in two lines, is the signature of the gem-engraver, Pheidias.

15. Carnelian, in Berlin Museum (Catal. No. 6434).

Zeus Serapis, a mantle over one shoulder and about his legs, with a kalathos on his head and holding a long sceptre. Beside him is the three-headed dog of the Underworld, Kerberos. Work of the school of Lysippos.

16. Carnelian, in Hermitage Museum, St. Petersburg.

A mounted man leading a pack-horse. A slave going before him carries a slain deer on his shoulders. Evidently a return from the hunt. Sketchy work.

17. Convex agate, from Asia Minor.

Harpokratēs, nude save for a mantle over one arm, carrying a cornucopia. On his head is a lotos flower and his finger is at his lips in his characteristic gesture.

18. Convex sard, in Hermitage Museum, St. Petersburg.

Head of Hēraklēs as a child with the lion's skin about his neck.

19. Carnelian scaraboid, unbored, with the picture on the convex side.

A female Herm-bust with fillet and long ringlets.

20. Strongly convex garnet.

A dolphin.

21. Dark convex carnelian. Formerly in my collection but lost in August, 1910. Set in modern silver ring.

A nude, bearded man running and bearing a torch and a palm-branch. Evidently the signet of some victor in the torch-race and assumed in commemoration of the event. The bent-knee running action is an affectation of the earlier style.

PLATE XVI

HELLENISTIC GEMS (*concluded*)

(*These are ring-stones except when otherwise stated.*)

1. Sardonyx of two layers, in Hermitage Museum, St. Petersburg.

Bust-portrait of some Hellenistic king with fillet diadem and cloak. The eyes are widely open. The likeness resembles that of Antiochos II as found on his coinage. The gem is too large for a ring and must have been used as an ornament.

2. Sardonyx of two layers, in Hermitage Museum, St. Petersburg.

Bust-portrait of Mithridatēs VI (Eupatōr) with fillet diadem, corselet, and cloak. The brooches fastening the latter are decorated with thunderbolts. The eyes are widely open, showing the pupils, and the beard is short. The gem is much too large for any ring and was undoubtedly an ornament. It is a fine example of the portraiture of the times.

3. Carnelian, in Hermitage Museum, St. Petersburg.

Bust-portrait, with tunic, of an Hellenistic queen with hair arrangement like that on coins of Berenikē II. She wears a fillet diadem and a laurel wreath.

4. Convex carnelian, in Hermitage Museum, St. Petersburg.

Portrait-head of an Hellenistic king wearing a diadem. The prominent eyes have the Ptolemaic character.

5. Carnelian, in Berlin Museum (Catal. No. 6953).

Bust of a laurel-crowned woman with flowing hair. In one hand she holds a serpent before her. Doubtless intended to represent some prophetess and priestess of Apollō, perhaps Kassandra.

6. Chalcedony, in Boston Museum (No. 98.727).

Bearded, laurel-crowned portrait-head, not unlike the portraits of King Perseus of Macedonia. Some doubt has been cast on the genuineness of this gem, but Furtwängler gives it as Hellenistic work. He seems to have had no opportunity to examine the stone itself. It is certainly fine work.

7. Carnelian, in British Museum (Catal. No. 1103).

Nearly full-face head of Hēlios, crowned with rays. The eyes are widely open and show the pupils.

8. Convex brownish-yellow chalcedony sprinkled with yellow jasper, in British Museum (Catal. No. 1529).

Portrait-head resembling that of Eumenēs I of Pergamos as seen on his coinage. The cloak shows about his shoulders.

9. Clear yellowish-brown sard, sprinkled with yellowish jasper, scaraboid, bored through, with the picture on the flat surface; in Berlin Museum (Catal. No. 1009).

Portrait-head of a beardless man with widely open eyes showing the pupils. On the convex side of the stone (not

shown here) is engraved a shield bearing a Gorgōn's head with wings and two serpents knotted under the chin. The date of this gem may be in the latter half of the fourth century B. C.

10. Convex garnet (chipped), in Hermitage Museum, St. Petersburg.

Female head, probably a portrait, with ear-rings and long hair.

11. Strongly convex garnet, in Hermitage Museum, St. Petersburg.

Idealistic female head with laurel wreath and long hair. The eyes are widely open.

12. Convex carnelian, in Berlin Museum (Catal. No. 1105).

Nearly full-face bust of Zeus-Serapis with tunic and mantle. On the head is a modius ornamented with olive leaves. The cutting is very deep.

13. Strongly convex garnet, in Hermitage Museum, St. Petersburg.

Head of a youthful satyr with goat's horns and a fawn's skin fastened under his chin.

14. Convex garnet, in Hermitage Museum, St. Petersburg.

Portrait-bust with cloak or tunic and laurel wreath.

PLATE XVII

EARLY ROMAN GEMS UNDER ETRUSCAN INFLUENCE

(These are ring-stones except when otherwise stated. The scarabs are bored through the longer axis.)

1. Carnelian, owner unknown.

Two Salii, priests of Mars, carrying, hung on a pole between them, five squarish ancilii (sacred shields), the sides indented and decorated with lines and dots. The first priest has in his hand a pointed priest's cap with cheek-flaps, and both wear helmets and short coats. Cable border.

2. Carnelian (somewhat chipped), in collection of W. Gedney Beatty, New York.

A warrior with helmet, corselet, spear, sword, and shield bearing the device of a thunderbolt. He is leading a war-horse. Inscription, S E. Cable border.

3. Dark red carnelian.

Cheirōn teaching the young Achilles to play the lyre. Behind him is a column against which leans a thyrsos. Cable border. Crude, poor work.

4. Carnelian scarab.

Kapaneus, nude and beardless, with helmet, shield, and sword, falling from the broken ladder. Cable border.

5. Carnelian, in Hermitage Museum, St. Petersburg.

A young hero, nude and beardless, his shield on his arm, his helmet fallen off, apparently dying but writing, with his failing strength, the word, VICT, on the shield of a vanquished foe. One of these has fallen behind the shield and another is sinking down in the background. Undoubtedly Orthryadēs, the Spartan hero of Thyrea (compare Pl. XXXII, 10).

6. Carnelian scarab, in British Museum.

A bearded man and two beardless youths, all nude, around whom three large serpents are twining. It is evidently a picture of the death of Laocoön and his sons. The father and one son show their hair disordered and as if erect with fright. The other youth's hair has the rolled band treatment common in this epoch. Cable border. It is possible that this gem may be late Etruscan, but the style and the subject point more clearly to a Roman origin. The group, it will be noticed, is not at all like that in the Vatican.

7. Translucent carnelian scarab, in British Museum (Catal. No. 292).

A cult group of three female figures in long garments, the middle one, shown in full front, is looking up toward a sword which one of her companions holds above her. She wears a necklace. The two side figures, done in profile, face toward her and each carries a small pitcher. Their hair is executed with parallel strokes and is arranged with the bunch behind common in this epoch. Cable border.

8. Carnelian, in Boston Museum (No. 98.722).

A beardless warrior, in full panoply of the Italian style, stooping down on one knee, sword in hand and with head bent toward the ground. His corselet is elaborately ornamented and a sphinx is depicted on the back. This is one of a considerable number of pictures about the subject of which Furtwängler hazards the unsatisfying guess of Decius Mus. Cable border (compare Pl. XXXII, 12).

9. Banded sardonyx, in Berlin Museum (Catal. No. 853).

A bearded man, with hair treated characteristically with the bunch behind and cloak following the line of his back, standing with raised knife before an altar behind which is a stag. Doubtless intended for Virbius, the male counterpart

(or the first priest) of Diana Nemorensis, whom the Italians identified with Hyppolitos. Cable border.

10. Carnelian, in Berlin Museum (Catal. No. 868).

A nude, beardless youth with a curved knife in his hand, bending over a goat's head which he holds by the horn. Probably one of the Luperci who sacrificed goats in honor of Faunus. Inscription, CROSC, part of the owner's name. Cable border.

11. Dark brown sard, in Berlin Museum (Catal. No. 440).

Hermēs Psychopompos, beardless and with cloak following the curve of his back, bending down to raise up a soul from the Underworld. He carries a winged caduceus. The soul is indicated by a man's head and one arm, the hand of which the god holds. Cable border.

12. Slightly convex carnelian, in Berlin Museum (Catal. No. 873).

A nude, beardless warrior, with a helmet and a shield, standing before a column around which a serpent twines and on which is perched a bird. A ram kneels at its foot. Undoubtedly a hero consulting the oracle of Mars to whom the woodpecker was sacred and the ram offered in sacrifice. The twining serpent suggests the oracular idea. Inscription, POTITI, the owner's name.

13. Carnelian, in Berlin Museum (Catal. No. 647).

Ajax, bearded and in full panoply, carrying the dead body of Achilles, also in full panoply but beardless. The arrow of Paris is fixed in the latter's foot. The picture and lack of border show the influence of the free style.

14. Banded sardonyx, in Berlin Museum (Catal. No. 445).

A beardless man, with a sceptre or measuring rod and a cloak following the back curve, bending over the upper half of a human figure. Probably intended to represent Promētheus creating a man, as the idea was accepted in the Orphic cults of Italy. Cable border.

15. Brownish sard, in Berlin Museum (Catal. No. 417).

A peasant, in tunic and cloak, leaning on his staff and contemplating a head which lies on the ground before him. One of a large group of pictures with evidently a definite meaning but of which no satisfying interpretation has been offered. Cable border.

16. Dark carnelian or sard, in Metropolitan Museum, New York (King Coll., Catal. No. 243).

A beardless man, with cloak following his back-line, shaping with an adze the stem-piece of a ship. Doubtless Argos at work on the Argō.

17. Chalcedony or white carnelian, in Berlin Museum (Catal. No. 799).

Oidipous, nude and beardless, standing with his sword at his side before a rock on which is the Sphinx whose riddle he is answering.

18. Brownish sard, in Berlin Museum (Catal. No. 488).

A bearded man, in corselet and cloak following his back-line, standing, with a sacrificial dish in one hand and a raised knife in the other, before an altar on which is the upper half of the body of a beardless youth. Evidently a representation of human sacrifice not unknown in the Italian cults. Cable border.

19. Carnelian with white stripes, in Berlin Museum (Catal. No. 850).

A nude, beardless man, in a pointed priest's cap and carrying a lituus (augur's wand), standing, with hand raised as if in adoration, before a palm tree. Though squarish in shape the gem lacks the usual border.

20. Carnelian, in Berlin Museum (Catal. No. 472).

A nude, beardless youth, his hair treated with the side-roll and the bunch behind as is characteristic of the later severe style, standing with a sword in one hand and a severed head in the other. One of a long line of unexplained pictures. Cable border.

21. Banded agate scarab, in British Museum (Catal. No. 422).

A bearded man, with a cloak wrapped about his hips and legs, holding a sacrificial dish from which hangs what seems to be a chain with a ring attached over an altar with a cover and a branch thrown about it. Inscription, in Greek letters, ANNIA·CEBACTH: the name of the owner, Annia Augusta, turned into Greek. Cable border.

22. Banded sardonyx, in Berlin Museum (Catal. No. 392).

A bearded man, in a cloak, writing on a tablet what seems to be the oracular response given by a head which, with part of the body attached, rises from the ground before him. Furtwängler has interpreted this line of pictures very satisfactorily as Orphic signets showing the head of Orpheus, fabled to have been kept at Antissa, in Lesbos, where it uttered the oracles of Apollō.

23. Banded sardonyx, in Hermitage Museum, St. Petersburg.

Two nude youths, one with a cloak over his arm and holding an unidentifiable object, the other holding a branch. They are probably Orestēs and Pyladēs. The hair is done with the roll arrangement of the severe Greek styles.

24. Banded sardonyx, in Berlin Museum (Catal. No. 623).

A bearded hero, with helmet, greaves, sword, spear, and a shield bearing the device of a star, standing over and evidently protecting a fallen hero, also bearded. The latter wears a helmet and a tunic which has fallen from one shoulder. Possibly the defending hero is Ajax. Cable border.

25. Carnelian, in Berlin Museum (Catal. No. 749).

A bearded priest, with his cloak wrapped about his hips and legs, leading a bull for sacrifice to a wreathed altar. In the background are two bearded attendants, one with a double sacrificial axe. Beyond the altar is a leafless tree. Beneath the picture is a sort of criss-cross line and dot ornamentation.

PLATE XVIII

EARLY ROMAN GEMS UNDER HELLENISTIC INFLUENCE

(These are all ring-stones.)

1. Convex brownish sard, in Berlin Museum (Catal. No. 1312).

Hēraklēs, bearded and nude, micturating. His lion-skin is thrown over his shoulder and he carries his club.

2. Convex dark brownish sard, in Berlin Museum (Catal. No. 1376).

Odysseus, bearded and nude save for the cloak thrown over his arm, seems to be returning to his home. He wears the pointed pilos on his head. The same subject appears on the coins of the Mamilian gens. Inscription, M · VOL; the owner's abbreviated name, doubtless a member of that family.

3. Unknown convex stone, in Berlin Museum (?).

A horseman, with corselet, helmet, shield, lance, and sword, pitching forward from his stumbling horse. It is undoubtedly a picture of Marcus Curtius plunging, as a self-chosen sacrifice, into the chasm that opened in the Forum.

4. Convex carnelian, in Hermitage Museum, St. Petersburg.

Kassandra seated, fully draped and embracing the Palladium which stands on a wreathed altar.

5. Convex carnelian, in Hermitage Museum, St. Petersburg.

Urania seated, fully draped and holding a globe on which she seems to be writing.

6. Brownish sard, in Metropolitan Museum, New York (King Coll., Catal. No. 166).

Two Roman knights attacking two Gauls, distinguished by the Gallic shield, one of whom has fallen and the other, sunk on one knee, still defends himself.

7. Convex amethyst, from Rome, in Berlin Museum (Catal. No. 1716).

Dancing satyr with small horns, nude save for a goat's skin thrown over his arm. Before him is a pedum. Inscription, Q·C; the owner's initials.

8. Convex brownish sard, in Hermitage Museum, St. Petersburg.

Liber, bearded, in long tunic and mantle, holding a thyrsos with fillets and with a wreath about his shoulders.

9. Slightly convex chalcedony with moss-agate striations.

Cupid riding on a rooster emblematic of desire.

10. Convex brownish sard, in Berlin Museum (Catal. No. 1625).

Cupid rolling a hoop.

11. Deep brownish convex sard, in Hermitage Museum, St. Petersburg.

An old shepherd, in a short tunic and cloak, leaning on a staff with three sheep before him. Inscription, M·AL B·HIL; in two lines; the owner's name abbreviated.

12. Clear brownish convex sard, in Berlin Museum (Catal. No. 2233).

A club with a bird perched on it. Beneath, a dart. Inscription, PROTEMVS; the owner's name.

13. Convex brownish sard with striations.

A peacock.

14. Convex carnelian, in Berlin Museum (Catal. No. 2037).

A lion attacked by a large ant.

15. Convex brownish sard, in Berlin Museum (Catal. No. 1248).

An actor wearing a mask representing the slave of the comedies and running. Inscription, M; the owner's initial.

16. Carnelian, in Berlin Museum (Catal. No. 6711).

A shoe. Inscription, MEMENTO.

17. Convex brownish sard, in Berlin Museum (Catal. No. 1798).

An eagle with spread wings, his body a man's head. Possibly the combination is inspired by the Ganymēdēs myth.

18. Carnelian, in Berlin Museum (Catal. No. 6616).

A winged Gorgōn head from which issue three legs and three ears of grain; the Sicilian emblem. Inscription, ΕΥΦΗΜΙ (Euphemi); the owner's name in the genitive with two letters ligatured.

19. Clear brownish sard, in Berlin Museum (Catal. No. 6517).

A dwarf, in pointed cap and cloak, blowing a double flute.

20. Convex brownish sard, in British Museum (Catal. No. 1624).

A sun-dial on a column with a sword behind it and a helmet lying on the ground. Inscription, Α·FOL; the owner's name abbreviated. (On the flat side has been added at a much later period the laureated head of a young emperor, perhaps Commodus. See Pl. XXI, 8.)

21. Convex garnet, in Berlin Museum (Catal. No. 1950).

Female comedy mask with a head-cloth. Inscription, ΑΠΟΛΛΟΝΙΔΕΣ; the owner's name.

22. Dark brownish convex sard, in Berlin Museum (Catal. No. 1783).

Bust of Victory, winged and with a palm-branch. On the head is a lotos flower indicating a combination of Victory and Isis.

23. Convex carnelian, in Hermitage Museum, St. Petersburg.

Head of Libya decked with the skin of an elephant's head with trunk and tusks.

24. Clear brownish convex sard, from Rome, in Berlin Museum (Catal. No. 1759).

Bust of a young satyr or river-god with pointed ears and short horns. Inscription, C; the owner's initial.

25. Carnelian, in Metropolitan Museum, New York (King Coll., Catal. No. 256).

Portrait head of a bald man with part of the rim of a shield in front. This is the stone which Dr. King thinks, on the score of its resemblance to the denarii likenesses, may have been the signet of Marcellus which Hannibal used on forged letters after the death of the Roman general. I have introduced the gem here for that reason, but the assumption, while most interesting, does not seem to me very probable. 208 B. C. was a pretty early date for Roman gem-portraiture, though, of course, a Roman might have had his portrait cut by a Greek of Southern Italy. Moreover, I cannot quite dismiss a suspicion of the antiquity of the gem.

PLATE XIX

EARLY ROMAN GEMS UNDER THE COMBINING ETRUSCAN AND HELLENISTIC INFLUENCES

(These are all ring-stones.)

1. Slightly convex carnelian, in British Museum (Catal. No. 998).

Liber, bearded, seated on a rock, his cloak about his legs and a thyrsos over his shoulder, reaching out his hand for a goblet which a bearded, horse-tailed Seilēnos, also with a thyrsos and a cloak over his arm and about his thighs, holds, while a satyr fills it from a wine-skin. Behind Seilēnos a vine is growing. Cable border. It is possible that this gem may belong to early imperial times.

2. Reddish brown sard, in British Museum.

Artemis, clothed in a long garment with one breast and shoulder bare, holding her bow in one hand and, with the other, the horn of a stag that stands beside her. The hair shows a band of dots with a braid hanging behind. The inscription, HEIOY, Furtwängler holds to be genuine: the name of a Roman owner, but it seems to me very unlike most of the work of its kind on these gems, especially, in its regular placing, which is more as the later forgers did such things. Cable border, nearly worn away by the repolishing to which the stone has been subjected.

3. Banded sardonyx, in Berlin Museum (Catal. No. 947).

Psychē with butterfly-wings and in long tunic. With one hand she holds up the bottom of her robe and with the other she draws out the top with the bent-arm gesture peculiar to Nemesis. This Psychē-Nemesis combination is very interesting. The style of work shows a lingering Etruscan influence but the picture type and the lack of border indicate its failing force.

4. Carnelian, in Berlin Museum (Catal. No. 6468).

A pantheistic male figure, nude but for the cloak over his arm. He wears the helmet of Mars, whose sword and shield are at his feet. Also, he carries the winged caduceus of Mercury and the cornucopia of Fortuna. One foot is raised and rests upon the orb of the World. A most interesting conception suggesting the World-power of Rome under the fostering care of the gods.

5. Sardonyx of two layers, in Berlin Museum (Catal. No. 929).

Erōs, nude, winged, and rising on his toes as if to suggest flight. His arms are in the position of drawing a bow which, however, is not figured. Interesting as showing a reversion to the earlier type of the youthful Erōs.

6. Carnelian, in Hermitage Museum, St. Petersburg.

A fully dressed girl seated under a tree, as if sleeping, with her hands on her knees. Before her are a kalathos, an ant, and two ears of grain. Above is a bird perched on a wreathed thyrsos. The interpretation of this picture is explained at length at the end of Chap. VI. Exergue filled with cross-strokes.

7. Blackish sard, in Berlin Museum (Catal. No. 6643).

Symbols: a hand holding a winged caduceus; above, a butterfly, perhaps Psychē, and a club. Inscription, in ligatured letters, AΛO (amo). The whole is apparently an invocation by the wearer of strength and cunning in the cause of love.

8. Banded sardonyx, in Berlin Museum (Catal. No. 932).

A fully clothed female figure standing in a flower, probably Aphroditē. In each hand she holds a branch with fruit on it. The symbolism seems to convey the idea of the fructifying power of the goddess.

9. Brownish sard, in Berlin Museum (Catal. No. 6518).

Two skeletons, one of whom is crowning the other. Significant of the shortness of life and the moral that it is best to enjoy it. Probably the signet of some philosophic Epicurean.

10. Carnelian, in Berlin Museum (Catal. No. 6780).

Psychē, with butterfly wings and fully draped, her hands bound behind her, is seated on an altar before a column upon which is a statue of Aphroditē whom she seems to be beseeching for mercy.

11. Carnelian, in Hermitage Museum, St. Petersburg.

Symbols: The rudder of Fortuna and an ear of grain. Inscription, with many ligatures, PLOSTRAT (Philostrati); the owner's name in the genitive.

12. Carnelian, in Berlin Museum (Catal. No. 6566).

A boar with grain (?) or acorns (?) on the ground before him, and a rooster with an ear of grain in his beak. In the field, a caduceus and a club. Cable border.

13. Convex brown paste, in the collection of W. Gedney Beatty, New York.
Aphroditē or Lēda with a mantle on one arm and a swan beside her.
14. Banded sardonyx, in Berlin Museum (Catal. No. 944).
Herm bust of Psychē with butterfly-wings.
15. Chalcedony, in Berlin Museum (Catal. No. 6524).
A locust or grasshopper armed with a sword and shield.
16. Slightly convex carnelian, in Berlin Museum (Catal. No. 1439).
Poseidōn, bearded and nude save for a cloak over his arm, with his foot on the prow of a ship and holding his trident in one hand and a dolphin in the other. A forerunner of one of the established types of a later period.
17. Banded sardonyx, in Berlin Museum (Catal. No. 7082).
Heads of a horse, ram, and bull with an ear of grain in its mouth. This gem may belong to the imperial period.
18. Banded sardonyx, in Berlin Museum (Catal. No. 6677).
A Corinthian helmet decorated with a Pēgasos, a buck, and a sphinx.
19. Carnelian, in Berlin Museum (Catal. No. 6528).
Herm bust of Hypnos with butterfly-wings and fillet.
20. Convex carnelian, in Berlin Museum (Catal. No. 1263).
A bearded philosopher, with his mantle about his legs, seated in a chair before an ithyphallic, bearded Herm and writing on his tablets.
21. Red jasper, in Berlin Museum (Catal. No. 6536).
A rather poor portrait-head of Pompey resembling those on his coins. Inscription, P P. Late work of the period.
22. Brownish sard, in Berlin Museum (Catal. No. 1873).
Portrait-head of some poet or actor with a comedy mask and a club (?) in the field.

PLATE XX

SIGNED GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE

(Except when too large the gems on this plate are ring-stones.)

1. Bluish aquamarine, in British Museum (Catal. No. 1281).
Head of the youthful Hercules, his club over his shoulder. A charming work which goes back to some Praxitelean model. Beneath, in very light lettering, is the inscription, ΓΝΑΙΟC; the signature of the artist, Gnæus, as well held

by Furtwängler, though A. S. Murray thinks it an owner's name. A strong argument for its genuineness is that it stood on the gem at least as early as 1606 when Faber, in his commentaries on the *Imagines* of Fulvius Ursinus (p. 66), mentions it. Gnæus was evidently a Roman, who Hellenicised his name for obvious business reasons.

2. Clear yellowish carnelian, in British Museum.

Hermēs, nude save for the mantle thrown over one shoulder, his caduceus in one hand and a sacrificial dish containing a ram's head in the other. He stands in profile with his head turned full-face, the pose suggesting Praxitelēs. Inscription, ΔΙΟΚΚΟΥΡΙΔΟΥ; the signature of Dioskouridēs, the greatest gem-engraver of Augustan times.

3. Carnelian, in Hermitage Museum, St. Petersburg.

Filleted head of Apollō with cloak. Inscription, ΥΛΛΟΥ; the signature of the artist, Hyllos, son of Dioskouridēs. Behind the neck are the letters LAVR·MED, showing that the gem once belonged to Lorenzo dei Medici.

4. Glass-paste in imitation of a hyacinth, formerly among the Marlborough gems.

A nude athlete anointing himself with oil from a hydra which stands on a small table beside him. Evidently a copy from some statue. Inscription, ΓΝΑΙΟΥ; the Hellenicised signature of Gnæus, in the genitive.

5. Carnelian, last noted as in the Devonshire Collection.

Diomēdēs, nude save for the cloak thrown over his arm, seated upon a wreathed altar with the Palladium in one hand and his sword in the other. Before him stands a statue on a column at whose base lies a dead priest. Inscription, ΔΙΟΚΚΟΥΡΙΔΟΥ; the signature of the artist. The idea seems to have been taken from some painting, perhaps one by Polygnōtos.

6. Carnelian, in Berlin Museum (Catal. No. 6984).

Portrait of Sextus Pompeius, with short beard and moustache, similar to that on his gold coins. Inscription, ΑΓΘΑΝΓΚΑΟΥ (Agathangelou); the signature of the artist.

7. Aquamarine, last noted as in the Devonshire Collection.

A youthful, unbearded Hercules, his lion-skin over his arm and bearing on his shoulder either the Marathōn bull or one of the oxen of Gēryonēs. Probably copied from a statue. Inscription, ΑΝΤΕΡΩΤΟC; the signature of the artist, Anteros.

8. Cloudy chalcedony, rather large to have been used conveniently as a ring-stone, in British Museum (Catal. No. 1256).

Head of Medousa in profile with flowing hair with which serpents are mingled. Furtwängler regards the type as of about 400 B. C., and suggests that this may be an Augustan copy from the ancient painting of the Gorgōn by Timomachos. Inscription, ΣΟΛΩΝΟC, the name of the gem-engraver, Solōn.

This is the famous Strozzi Medousa, and the antiquity of both the gem and the signature, especially the latter, has been the subject of violent dispute. The weight of authorities, including Furtwängler's strong pronunciamento, is in favor of the head's genuineness. I have not had an opportunity to examine the stone itself, but there is certainly something suspiciously dramatic about the picture. As for the signature, Furtwängler first denied its authenticity but finally supported it, though his arguments are not altogether convincing to me. His final argument is on p. 192 of Vol. II, of his *Die Antiken Gemmen*. Also there is an interesting dissertation on the subject on p. 148 of the Gem Catalogue of the British Museum. The stone is very beautiful and is certainly worth including here, if only as an example of one of the knotty problems that have divided the experts.

9. Red jasper, also very large for a ring-stone, in Vienna Museum.

Bust of Athēna, copied from the Athēna Parthenos of Pheidias. Inscription, ΑCΠΑCΙΟΥ; the signature of the artist, Aspasios.

10. Carnelian (calcined), in British Museum (Catal. No. 2296).

Aphroditē, with a mantle about her legs, necklace, and bracelets, seated upon a rock and amusing Cupid by balancing a rod on one finger. The character of the picture is of the fourth century B. C., from which it is probably copied. Inscription, ΑΥΛΟC; the name of the artist, Aulus, in the nominative and Hellenicised.

11. Slightly convex aquamarine, much too large for any ring, in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 2089).

Bust-portrait of Julia, daughter of the Emperor, Titus, her hair elaborately dressed in the style of the period. Inscription, ΕΥΔΟC ΕΠΟΙΕΙ; the signature of the artist, Evodos.

12. Carnelian, in British Museum.

Nikē, winged, with mantle about her legs and sword in hand, bending over, as if to offer in sacrifice a bull which has sunk down. Inscription, $\text{C}\Omega\text{CTPATOY}$; the signature of the artist, Sōstratos.

13. Red jasper, in British Museum (Catal. No. 2293).

Herm-bust of the bearded Dionysos crowned with vine leaves and fillets. After some original of the Pheidian epoch. Inscription, $\text{ACT}\Pi\text{ACIOY}$; the signature of Aspasios.

14. Sardonyx of six layers, in Berlin Museum (Catal. No. 6866).

Thēseus, nude save for scarf hanging over one arm and holding his club in the other hand. A work very much in the style of Polycleitos. Inscription, YAAOY ; a signature of Hyllos.

15. Amethyst, in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 1815).

Achilleus, nude, seated on a rock over which his garment is thrown, and playing a lyre. Before him his sword hangs on a tree against the foot of which rests his shield ornamented with a Gorgōn's head and with running deer in the outer circle. Behind, on the rock, is his helmet. Inscription, $\text{ΠAM}\phi\text{ILOY}$; the signature of the artist, Pamphilos.

PLATE XXI

GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE (*continued*)

(*These are all ring-stones.*)

1. Carnelian, in British Museum (Catal. No. 758).

Bust of the Muse, Melpomenē, with flowing hair and tunic. Before her is a comedy mask on a column. Inscription, $\text{N}\Lambda\text{IOY}$; the signature of Gnæus with the Γ omitted. Both gem and signature have been strongly questioned by several authorities, but Dr. Furtwängler later changed his views and held them to be genuine. I have not myself been able to examine the stone. If a forgery it is a very clever one.

2. Carnelian (badly broken), from Smyrna, in Berlin Museum (Catal. No. 3179).

The upper part of a youthful head, the hair bound with a fillet and treated in the style of the fifth century B. C.

3. Convex amethyst, in British Museum.

Cupid seated before a trophy with his hands bound behind his back. Over his head is the inscription, ΑΥΛΟΥ; the signature of the artist, Aulus.

4. Dull greenish plasma, in British Museum.

Winged head of Medousa with serpents in her hair. Inscription, ΚΩΚΟΛΑΕ; the signature of the artist, Sōsoklē.

5. Carnelian, in British Museum (Catal. No. 6981).

A portrait-head with ears pointed like a satyr's, ivy wreath, and a fawn-skin about the neck. Before him is the face of a bearded mask. Probably the portrait of some comedian. Done in Hellenistic style.

6. Carnelian, in Berlin Museum (Catal. No. 6985).

Rather idealized portrait of Julius Cæsar with laurel crown and with a lituus and a star in the field. Probably a work of the principate of Augustus, though there seems to me a possibility of its being a modern forgery.

7. Carnelian (somewhat broken), in Berlin Museum (Catal. No. 6972).

Head of Sokratēs.

8. Convex brownish sard, in British Museum (Catal. No. 1624).

This gem was early Roman work under Hellenistic influence, with a sun-dial and the owner's name on the convex side. (See Pl. XVIII, 20). The present portrait of a youthful, beardless emperor, with laurel crown and fillets, was added on the flat side in imperial times.

9. Light translucent carnelian, from Viterbo, in collection of W. Gedney Beatty, New York.

A full-face tragedy mask, with hair banked up on top and falling down on both sides, done almost entirely with the drill and somewhat damaged by repolishing. This may be a somewhat earlier work.

10. Light translucent carnelian.

A comedy mask in profile with a pedum in the field.

11. Flat, truncated chalcedony, in collection of Nestor Sanborn, New York.

Head of Harpokratēs with upper part of the body. The hair is bound with a fillet and crowned with a lotos flower, and the finger is raised toward the lips in the customary gesture. Behind is a cornucopia.

12. Slightly convex red jasper.

A dolphin with a bearded mask for a head. Luck-bringing combination. Crude work.

13. Yellowish carnelian.

Two combined masks, one of them of the Seilēnos type.

Luck-bringing combination. Crude work.

14. Banded sardonyx, in Berlin Museum (Catal. No. 6934).

Head of Apollō with fillet and flowing hair. The edge of a cloak or tunic shows below the neck.

15. Red jasper, in Berlin Museum (Catal. No. 8524).

A bearded Seilēnos mask with a boar's head joined at the back and a second mask forming the boar's under jaw. Luck-bringing combination. Crude work.

16. Convex plasma, in Hermitage Museum, St. Petersburg.

Bust of Jupiter with laurel crown.

17. Convex sard (calcined), in collection of W. Gedney Beatty, New York.

Head of Jupiter Serapis crowned with the modius. Above is a crescent, before him, a sun or star and, flying toward him, a winged Victory with a wreath which she is about to place on his head. Below is an eagle perched on an ox's skull. A common subject of imperial times, though the ox's skull is rare and suggests Mithraic influence.

18. Carnelian (somewhat broken), in Berlin Museum (Catal. No. 6967).

A copy bust from the famous Amazon statue of Kresilas.

19. Carnelian of different shades, in Metropolitan Museum, New York (King Coll., Catal. No. 65).

Bearded and veiled head, perhaps of Saturn. If so, it is a very rare gem subject which Dr. King suggests may have been the signet of one of the Sentia gens in which Saturninus was a cognomen.

20. Convex carnelian (somewhat broken), in British Museum (Catal. No. 561).

Head and body of a reclining mainad holding a bearded comedy mask in her hand and with a thyrsos lying across her arm. Her garment is about her hips. Inscription, ΔΙΟΚΚ; a modern forgery of the signature of Dioskouridēs.

21. Carnelian (broken), in Berlin Museum (Catal. No. 6872).

A nude youth, with a pedum, holding a fawn by one foot before a column on which stands a statue of the bearded Dionysos with thyrsos and kantharos. Behind the column is

a tree. Possibly but not very probably Pan. Fine work showing the influence of Polycleitos.

PLATE XXII

GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE (*continued*)

(*These are ring-stones except when otherwise stated.*)

1. Slightly convex carnelian, too large for a ring-signet and very deeply cut, so as to be effective as an ornament; in Hermitage Museum, St. Petersburg.

Bust of Medousa with serpents mingled with her filleted hair and wings on her head. On her breast is a gorget of scales with a serpent collar.

2. Strongly convex amethyst, in Berlin Museum (Catal. No. 2298).

Dionysos, bearded, in a long tunic and with a fawn-skin thrown over his shoulder and girt about him. In one hand he carries his thyrsos, in the other a bunch of grapes. It is possible that this gem is Hellenistic work.

3. Unknown stone and owner. The cast shows that the gem is somewhat broken.

Representation of a chariot race in the circus with four four-horse chariots driving down one of the sides. Behind the last is a man on horse-back and, in the midst, one on foot, evidently thrown from his car. Above is shown the long central wall or spina and, at each end, the three conical pillars marking the starting and turning points. In the middle is the obelisk which, after Augustus' time, took the place of the ship's mast which had previously stood there. On the spina are, also, the figure of the winged Victory with a wreath, another statue, and the altars and small shrines with which it was decorated. The whole is a most interesting and illuminating record, dating certainly later than Augustus and, probably, in the second century, when the chariot races had become very popular. Several gems show similar pictures.

4. Convex carnelian, from Rome, in Berlin Museum (Catal. No. 2296).

Apollō, nude, standing by a column on which is a vase, his bow and arrows in one hand, a laurel wreath with fillets in the other. The motive is taken from some statue of the Pheidian epoch.

5. Convex amethyst, too large for a ring-signet and very deeply cut so as to be effective as an ornament; in Hermitage Museum, St. Petersburg.

A woman with garment about her legs, probably Aphroditē, riding a sea-dragon. She holds a shell in her hand and, above, floats a Cupid.

6. Unknown stone and owner.

Mask of the bearded Dionysos, with wreath of flowers and flowing hair.

7. Unknown stone and owner.

Bearded mask, probably of Pan, with long hair and budding horns on the forehead.

8. Banded agate (calcined by fire and broken).

Hygeia, her mantle about her legs and with one foot raised on what looks like a shield with indented sides. She holds her serpent in one hand and is feeding it from a horn which she holds in the other.

9. Chalcedony scaraboid, in Ashmolean Museum, Oxford. (The following picture has been cut, probably about 100 A. D., on the convex side of a scaraboid having on its base the engraving of the best period described, Pl. VIII, 19).

Facing busts of Jupiter Serapis with the modius on his head and of Isis with the lotos flower on hers. Between them is a faintly engraved object, apparently an altar with a flame.

10. Carnelian, in Boston Museum (No. 99,103).

Three-quarters figure of a young Tritōn with a Nērēid seated on his back, their garments about their thighs. In the water beside them are a Cupid and a dolphin. The inscription, ΥΑΛΟΥ, is considered a modern forgery of the signature of Hyllos.

11. Carnelian, from Kumē, in Metropolitan Museum, New York (King Coll., Catal. No. 75).

A serpent-legged Earth-giant, with a sword in one hand and a lion's skin, which he uses for a buckler, in the other.

12. Carnelian, in Boston Museum (No. 99,102).

Hermēs, nude save for the cloak hanging from his shoulders, playing the lyre. His petasos also hangs on his back, and his feet are winged. Fine Augustan work.

13. Carnelian, in Berlin Museum (Catal. No. 6966).

Bust of the youthful, unbearded Hercules with lion's skin on his head. Type of the coins of Alexander.

PLATE XXIII

GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE (*continued*)

(*These are all ring-stones.*)

1. Dark sard, slightly convex, in Metropolitan Museum, New York (King Coll., Catal. No. 73).

Either Cybele or Syria Dea, probably the former, though King has catalogued it as a copy of the famous statue of the Syria Dea of Emesa described by Lucian. The goddess is shown full-face, wearing the crown of turrets, draped, and seated on a throne which rests on the haunches of lions. She holds a tympanum (?) in one hand and a bunch of wheat ears in the other. Work, probably, of not earlier than 100 A. D., and, possibly, considerably later.

2. Brownish variegated jasper (slightly chipped).

Ceres, fully draped, seated on a throne without a back and holding out wheat ears in her hand over what seems like a small conical altar with horns. Probably not earlier work than of 100 A. D.

3. Convex carnelian, in British Museum (Catal. No. 722).

Apollō, nude, leaning on a tree up which a lizard crawls.

Copied from the Apollō Sauroktonos of Praxitelēs.

4. Carnelian, in Berlin Museum (Catal. No. 2649).

Apollō, nude, with fillet-bound hair, his bow in one hand, a fawn in the other. Taken from the archaic statue of Kanachos as shown on the Milesian coinage.

5. Glass-paste imitating a brown sard.

Dionysos, beardless, seated on a throne, his garment about his hips and legs, and holding a thyrsos. Before him is a panther.

6. Carnelian, in Berlin Museum (Catal. No. 6762).

Aphroditē, in full-front, nude, holding her long tresses in her hands. The type is of the Anadyomenē and the work is evidently taken from a statue of about Alexander's time.

7. Carnelian (slightly chipped), in Berlin Museum (Catal. No. 6742).

Artemis fully draped and running, her bow in one hand, a torch in the other, and her quiver on her back. The work shows archaic influence and suggests the Artemis Sôteira type.

8. Carnelian, in Hermitage Museum, St. Petersburg.
Cupid stringing his bow. Beneath are two arrows.
Taken from some Lysippean statue type.
9. Convex plasma, in Berlin Museum (Catal. No. 2313).
A good genius with mantle about hips and legs. In one hand is a patera, in the other a cornucopia ending in a goat's head. Statue type.
10. Nicolo, in Berlin Museum (Catal. No. 6764).
Aphroditē, nude, a spear leaning against her shoulder, and a helmet in one hand, the other raised to her head, in the attitude of the Diadumenos, with the elbow resting on the shield. Taken from some statue type of Alexander's time.
11. Chalcedony, in Berlin Museum (Catal. No. 6714).
Jupiter, nude and beardless, a thunderbolt in one hand, a sceptre in the other. Taken, certainly, from some statue type, perhaps of the beardless Jupiter of Anxur.
12. Convex chalcedony, in Berlin Museum (Catal. No. 2610).
Jupiter, bearded and nude save for a mantle over his arm. In one hand he holds a thunderbolt, in the other his sceptre. At his feet is an eagle. A statue type similar to that of the Capitoline Jupiter on the medals of Trajan and Hadrian.
13. Red jasper, in Berlin Museum (Catal. No. 8389).
Jupiter enthroned, his mantle about his legs and grasping by the hair a suppliant serpent-legged Earth-giant at whom he is about to launch the thunderbolt. Behind the giant is a column surmounted by a winged Victory with wreath upon whose head an eagle perches. Work, probably, of the second century A. D.
14. Nicolo, in Berlin Museum (Catal. No. 6718).
Hermēs, nude, leaning on a low column, his caduceus in one hand. From some statue of the school of Polykleitos.
15. Nicolo, in Berlin Museum (Catal. No. 6719).
Hermēs, in cloak and petasos, his caduceus in his hand. Before him goes a ram. Statue type.
16. Convex plasma, from Pompeii (?).
Hermēs, nude but for a scarf over his arm. In one hand he holds the caduceus, in the other a purse. At his feet is a cock. Statue type.
17. Convex plasma, in collection of W. Gedney Beatty, New York.

Syria Dea, fully draped, enthroned between lions, holding a patera in her hand, and wearing the lotos flower of Isis on her head.

18. Carnelian, from Nola.

Isis, fully draped, her lotos flower on her head, her systrium in one hand, and a basket in the other.

19. Convex chalcedony, in collection of W. Gedney Beatty, New York.

Jupiter enthroned, his mantle about his hips and legs. One hand rests on a long sceptre, the other holds a patera. At his feet is an eagle. Conventional statue type.

20. Carnelian.

Neptune, nude and bearded, one hand resting on his trident, the other holding a dolphin. Statue type.

21. Red jasper.

Venus Victrix, her mantle about her legs, leaning on a low column against the base of which rests a shield. She holds a helmet in one hand and a spear in the other. A statue type very popular on gems and, probably, the same as that worn on the signet of Julius Cæsar.

22. Carnelian.

Mars Gradivus, advancing with spear in hand and a pole bearing a trophy over his shoulder.

23. Convex brownish red sard.

Mars Ultor, in full panoply with military cloak over his shoulders, one hand resting on his spear, the other on his shield beside him. Statue type. Second century work.

24. Carnelian.

Mars Navalis, nude, his foot resting on the prow of a ship. His shield is on his arm and he holds a dart in the same hand; in the other is a winged Victory. The type dates from the battle of Actium.

25. Carnelian (slightly chipped).

Minerva, fully draped, wearing a helmet, her shield beside her and one hand resting on her spear. The other holds a patera over a flaming altar. Statue type.

26. Carnelian (slightly chipped).

Diana of Ephesos with close reticulated garment coming below the knees. The hands reach out horizontally from her sides toward the two conventional supports, and, below, the foreparts of two stags issue from either side, their heads

turned upward as if seeking protection. The break in the stone obscures the form of the crown. Second century work.

27. Sardonyx, in the collection of Dr. Herschel Parker, New York.

Diana of the Aventine, closely draped to the feet, holding wheat ears in one hand, the other raised. From below issue the foreparts of cows.

PLATE XXIV

GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE (*continued*)

(*These are all ring-stones.*)

1. Carnelian, in Berlin Museum (Catal. No. 6790).

Cupid, with a stick, making two cocks fight. Nearby stands an ithyphallic Herm with a palm-branch. Squarish stone with cable border. This gem may be Hellenistic work. Neither the subject nor the technique give much aid in placing it.

2. Carnelian, in Berlin Museum (Catal. No. 6786).

Cupid, with a thyrsos, driving a chariot drawn by a goat and a lion. May be Hellenistic work.

3. Carnelian, in Berlin Museum (Catal. No. 6809).

Cupid mounted on a bear which seems to be falling over backwards, as a dog attacks it. Representation of rocks suggests a landscape. May be Hellenistic work.

4. Carnelian, in Berlin Museum (Catal. No. 6918).

Two nude boys carrying a third by his arms and feet. Beneath them lies a ball. May be Hellenistic work.

5. Sard, in Hermitage Museum, St. Petersburg.

Bearded and wreathed head and upper body of Poseidōn, nude save for a scarf over one shoulder. Behind him is a trident of peculiar shape in that it has two long prongs branching out below the three. The engraving, especially of the hair, shows the influence of the severe Greek style.

6. Carnelian, in Berlin Museum (Catal. No. 6773).

Cupid, with his legs chained, leaning, mournful, on his extinguished torch. A symbol of dead love. Inscription, ILVS; the owner's name.

7. Carnelian, in Berlin Museum (Catal. No. 6794).

Two Cupids boxing, their hands armed with the cestus. One has been knocked down and hurt. May be Hellenistic work.

8. Carnelian (chipped), in Berlin Museum (Catal. No. 6778).

A weeping Cupid seated on rocks with his foot caught in a trap. Before him is another Cupid with a palm-branch.

9. Red jasper.

Thanatos, with crossed legs, leaning on an extinguished torch.

10. Carnelian, in Berlin Museum (Catal. No. 6766).

Aphroditē, nude save for a scarf falling over one arm and leg, leaning on a bearded Herm statue at whose base arms are heaped. Beside and beneath her are the attributes of Erōs: bow, quiver, and torch. Probably taken from some statue type of Alexander's time.

11. Carnelian, in Berlin Museum (Catal. No. 3006).

Aphroditē Anadyomenē standing in a representation of her temple, with steps, two fluted columns, and a gable roof with a crescent in the pediment.

12. Convex plasma, in Berlin Museum (Catal. No. 2393).

Venus Victrix, a mantle about her legs, leaning on a low column against which rests a shield and holding a dart and a helmet. Before her is a Cupid holding up a mirror (?). A similar gem in Vienna bears the name of the goddess in both Greek and Latin.

13. Red jasper, in Berlin Museum (Catal. No. 8392).

Apollō, with mantle about his legs and his lyre in his hand, regarding Marsyas, who is hanging by his bound hands on a tree. Before the god kneels Olympos, the satyr's pupil, begging for mercy.

14. Convex plasma.

Victory, winged and fully draped, with a palm-branch over her shoulder and a wreath in her hand.

15. Nicolo.

Victory, winged, her mantle about her legs, one foot raised on a rock and resting a shield on her knee.

16. Chalcedony, in Berlin Museum (Catal. No. 6746).

A genius, bearded and nude save for a scarf over his arm, holding a cornucopia and a patera. A rather overdone imitation of the archaic style.

17. Carnelian, in Berlin Museum (Catal. No. 815).

A woman, in a long tunic, seated and asleep. Behind her stands Hypnos, nude, bearded, and with large wings. Cable border. This gem must be dated very early in the Augustan period and may even belong to the group of the

combination epoch when the early Roman styles under Etruscan and Hellenistic influence were coming together.

18. Chalcedony, in Berlin Museum (Catal. No. 6435).

Artemis, nude, surprised at the bath by Aktaïōn, whose head, upon which the stag's horns are sprouting, peers over a rock upon which are her mantle, bow, and quiver. A water urn stands at its base and a stag's head hangs above. Characteristic Hellenistic work and may fall with that period.

19. Slightly convex brownish-red sard.

Æsculapius, a cloak over one shoulder and about his hips. Before him stands Hygeia, full draped. He holds his staff with the serpent twining around it, and she, her serpent and cup.

20. Carnelian, in Berlin Museum (Catal. No. 6747).

Triptolemos, nude save for the cloak over his arm. In one hand he holds wheat ears and a poppy; the other grasps the handle of a plough.

21. Nicolo, in Berlin Museum (Catal. No. 8185).

Bonus Eventus, nude, a wheat ear in one hand. The other holds a patera over a flaming altar.

22. Brownish sard, in Berlin Museum (Catal. No. 6857).

Poseidōn, nude and bearded, his trident in his hand, bearing away over the water, in his four-horse chariot, a fully draped maiden (Amymōnē?). In the water below sports a bearded Tritōn.

PLATE XXV

GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE (*continued*)

(These are all ring-stones.)

1. Dark brownish sard, in Berlin Museum (Catal. No. 6491).

Ajax, bearded and nude save for a mantle about his hips, seated, with drawn sword, resting his head on his hand. Around him are the heads of animals, an ox and a ram, which he has torn to pieces in his madness. Probably from the famous painting by Timomachos.

2. Carnelian (somewhat calcined).

A Cupid riding two hippocamps.

3. Carnelian of two shades, in Metropolitan Museum, New York (King Coll., Catal. No. 101).

Roma, fully draped, seated with spear and shield before a tree at the foot of which the wolf suckles Romulus and Remus. On the other side stands the shepherd, Faustus, in tunic and goat-skin cloak. Similar to the reverse of a denarius of the Gens Pompeia and, probably, the signet of some member of that family.

4. Convex sardonyx of three layers, in Metropolitan Museum, New York (King Coll., Catal. No. 214).

Nemesis, winged and fully draped, a branch of ash in her hand and plucking the tunic from her breast with the bent arm gesture peculiar to her.

5. Blackish sard, in Berlin Museum (Catal. No. 7650).

Hypnos, nude, a winged cap on his head, an inverted horn in one hand and two poppy-stalks in the other. Statue type, taken, probably, from either Skopas or Myrōn.

6. Nicolo, in Berlin Museum (Catal. No. 8199).

A winged female figure, nude save for a scarf over one arm, with legs crossed, leaning on a sort of double-thyrsos with a pine-cone at each end. At her feet is a goose or swan. Dr. Furtwängler, in whose *Die Antiken Gemmen* this gem appears (Pl. XLIII, 52), discusses it at length and seems inclined to regard it as a copy of the famous Skopas statue of Pothos. I cannot understand this attribution which, as its base, holds the figure to be masculine, a wholly untenable assumption. I have examined it very carefully and, while there may be some ground for a bi-sexual diagnosis, the female element is certainly preponderant. His conclusion that its reference is to the Dionysiac or Aphroditic cults is better substantiated by the thyrsos and goose(?), but, if we take the figure as meant to be bi-sexual, a most interesting and much more plausible attribution would name it an Orphic Erōs Prōtogenos. The thyrsos would then symbolize the Dionysiac side of Orphism and a swan, the myth of Lēda, which has a distinctly Orphic flavor.

7. Amethyst, in Berlin Museum (Catal. No. 6865).

Hercules, nude and beardless, his club in one hand, in the other the manlike head of the bull, Achelōos. Statuesque motive from pre-Lysippean times.

8. Carnelian, in collection of W. Gedney Beatty, New York.

Ulysses, with pointed cap and cloak over one shoulder and around his hips, leaning on his staff.

9. Sardonyx of two layers.

Fortuna, fully draped, with cornucopia and holding in her hand a winged Victory with wreath and palm-branch. Inscription, **M**; the owner's initial.

10. Convex plasma, in Berlin Museum (Catal. No. 2443).

Spes, fully draped, drawing out her garment with one hand and holding a flower in the other. Taken, undoubtedly, from an archaic Roman statue.

11. Nicolo, in British Museum (Catal. No. 1817).

A nude athlete holding a discus, with both hands raised above his head. Statuesque motive, probably from some work of Myrōn.

12. Convex plasma, in Berlin Museum (Catal. No. 2488).

A nude athlete with spear over his shoulder. Type of the Doryphoros of Polycleitos.

13. Convex plasma, in Berlin Museum (Catal. No. 2491).

A nude athlete, crowned, a discus in one hand and a palm-branch in the other, standing near a Herm statue. Perhaps copied from a work of Eupompos.

14. Slightly convex banded sardonyx, in Berlin Museum (Catal. No. 6882).

Achilleus, nude, seated, mournful, on a stool, his arm resting on his shield which bears the device of a sea-horse. His sword and helmet hang on a pillar near him. Probably taken from some painting.

15. Nicolo, in collection of Mrs. Henry Draper, New York.

A centaur with a thyrsos over one shoulder and carrying a large krater on the other.

16. Banded agate, owner unknown.

Æquitas, fully draped, with scales in one hand and cornucopia in the other.

17. Carnelian.

Three nude heroes in helmets, one supporting a second who also bears his shield and holds out one leg toward the third, who seems to be ministering to him. Undoubtedly Diomēdēs or Odysseus bringing Philoktētēs to Machaōn to be cured of his wound. Typical picture of the Etruscan-Roman period, such as was often copied in this epoch where the lack of border and the closed form of the **P** seem to place it. Inscription, **PQ**; the owner's initials.

18. Carnelian.

Draped female figure, probably Abundantia, with a cornucopia, seated and holding a patera over a flaming altar.

Inscription, E AP, ligatured; the owner's name abbreviated.
Probably second century work.

19. Nicolo, in Berlin Museum (Catal. No. 8236).

Hercules wrestling with Antaios, both of them nude and bearded. Probably taken from some statue or painting of Alexander's time.

20. Carnelian, in Berlin Museum (Catal. No. 7606).

A nude hero, with helmet, shield, and spear, dragging away by the hair a fully draped woman. Doubtless Ajax and Cassandra. Probably second century work.

21. Slightly convex red jasper, in Metropolitan Museum, New York (King Coll., Catal. No. 227).

Personification of some city, fully draped and wearing the mural crown, enthroned on the shoulders of a river-god (King suggests Antioch on the shoulders of the River Orontēs). On one side stands Fortuna with rudder and a modius on her head; on the other, not Victory, as King says, but the city's founder (if Antioch, Seleukos), wearing a corselet and with his sword under his arm, is crowning her with a wreath. Probably second century work.

22. Slightly convex amethyst, in Berlin Museum (Catal. No. 3411).

Decorated vase showing two handles above and one in front.

23. Blackish sard with two white stripes, in Berlin Museum (Catal. No. 7115).

Kantharos with two high handles decorated with masks and with a two-horse chariot on the bowl.

PLATE XXVI

GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE (*continued*)

(These are all ring-stones.)

1. Carnelian.

A war-galley containing two armed men.

2. Carnelian, in Berlin Museum (Catal. No. 7096).

War-galley with cock's head for prow and cock's tail at the stern. Above floats a butterfly. A talisman or amulet.

3. Carnelian.

A Tritōn with a rudder over his shoulder and holding a dolphin in his hand.

4. Carnelian.

A ram's head with an ear of wheat in its mouth. Inscription, HORESTI; the owner's name. A talisman or amulet. The cutting shows admirably what is known as the méplat style, where the whole design is sunk in the stone.

5. Carnelian.

A human figure in tunic and cloak which hangs down over one shoulder and having the head of an ass (?) but with short round ears. He carries a palm-branch and a caduceus, such as were borne by the jackal-headed Anubis in the Isiac procession as described in Book XI of *The Golden Ass* of Apuleius. In the field, also, is the systrum of Isis, but the head of this figure, with its short, round ears and thick muzzle, cannot be meant for that of a jackal or dog. The ass, hippopotamus, and several other animals were sacred to Set or Typhōn, and it may be that some worshipper of that god strove to combine his influence with that of Anubis, in the period of the popularity of Eastern and Egyptian cults in Rome. The subject, joined with the excellent work, seems to place the gem at the time of the Hadrianic revival of the art.

6. Nicolo, in Berlin Museum (Catal. No. 7084).

A cock, sacred to Hermēs, having a human head with the god's winged petasos and carrying his caduceus over its shoulder. A talisman or amulet.

7. Carnelian, in Berlin Museum (Catal. No. 7083).

A cock with an ass's head. A talisman or amulet.

8. Red jasper, in Berlin Museum (Catal. No. 7090).

The owl of Athēna having the helmeted head of the goddess instead of its own and carrying her spear over its shoulder. A talisman or amulet.

9. Nicolo, in Metropolitan Museum, New York (King Coll., Catal. No. 173).

Cupid, with a torch, peering into an urn out of which a skeleton is falling and from which a palm-branch springs. It symbolizes, apparently, the victory of love over death.

10. Bluish green transparent stone, in Metropolitan Museum, New York (King Coll., Catal. No. 53).

A nude, bi-sexual figure, in a half squatting attitude with spread legs. On the ground is a snail upon which a butterfly perches. Some Oriental cult, the identification of which is uncertain, is symbolized by this picture. King calls it "The Mother of Creation."

11. Carnelian.

Pēgasos.

12. Convex brownish sard, in Metropolitan Museum, New York (King Coll., Catal. No. 141).

A figure having the head of a goat and the body and tail of a scorpion, bearing a legionary standard. According to Manilius, "The warlike scorpion follows Mars," while, as may be found in my text, a number of the legions bore Capricorn for a sign, doubtless in honor of Augustus. The gem may be placed as the signet of an officer of one of these, who sought to invoke the astrological influence of both signs.

13. Red jasper, in Berlin Museum (Catal. No. 7089).

A helmeted sphinx, her tail ending in a serpent's head, with one paw on a shield against which rests a spear. Behind her is a bush. A talisman or amulet to invoke the aid of Athēna.

14. Light, translucent carnelian, in collection of W. Gedney Beatty, New York.

A peacock perching on a pitcher with a high handle.

15. Convex eye-agate.

Capricornus bearing a palm-branch. Beneath is a ball, perhaps the celestial globe. An astrological talisman which may be based on the verse of Manilius:

"Thou, for thy rule, O Capricorn! hast won
All that extends beneath the setting sun."

16. Nicolo, in Berlin Museum (Catal. No. 7079).

A scorpion gripping a fly by the head. On either side an ant, sacred to Ceres, is carrying a grain of wheat. Below are two stars and, above, a half-moon. A talisman or amulet.

17. Convex amethyst (calcined).

Eurōpē seated on the Zeus-bull.

18. Convex brown paste, in imitation of a sard.

Selēnē (or Lucina), draped, with a crescent on her head and holding a torch, driving a two-horse chariot.

19. Convex plasma, in Hermitage Museum, St. Petersburg.

A boar with its hind feet raised on a rock from around which a dog assails it. The design shows the Hellenistic taste for oblique, foreshortened views of animals, and the gem may belong to that epoch.

20. Carnelian, in Berlin Museum (Catal. No. 7120).

A signet ring circling a hare. On either side are wheat ears above one of which floats a butterfly. Across the bezel

a Cupid drives a chariot to which two cocks are yoked. Beneath is a bundle of rods (the fasces?). Inscription, *M·VIRRI*; the owner's name. A talisman or amulet.

21. Carnelian, in Berlin Museum (Catal. No. 7048).

A cow, under a tree, giving suck to her calf. The Hellenistic taste for foreshortening is even more pronounced here than in No. 19 above.

22. Convex amethyst.

A horse with a wreath in its mouth and a palm-branch at its feet. Some successful contestant in the circus, taken as a signet by its owner or backer.

23. Carnelian (slightly chipped), in collection of W. Gedney Beatty, New York.

A herd of seven deer.

24. Black jasper.

A sow. The color of the stone is appropriate to the Chthonian character of the sow as a sacrificial animal.

25. Carnelian (slightly chipped), in collection of W. Gedney Beatty, New York.

A running boar struck by an arrow and attacked by a dog. The identical picture is found on the denarii of the gens, Hosidia, and the gem was probably the signet of some member of that family.

26. Convex amethyst.

A grasshopper on a stalk of wheat nibbling at the grain.

27. Red jasper, in collection of Dr. Raley H. Bell, New York.

A crane carrying a cornu or nearly circular trumpet and a spear.

28. Carnelian.

A kalathos with a lamb capering on it and holding a wheat ear in its mouth. On one side is a cornucopia, on the other, a dolphin. A talisman or amulet.

29. Glass paste in imitation of a carnelian, from Campania.

A dwarf or gnome, in a pointed cap and a cloak, mounted on a goatfish, perhaps one of the Daktyloi. This gem may date much earlier and be work of republican times under Hellenistic influence.

30. Nicolo, in collection of W. Gedney Beatty, New York.

A ram, sacred to Hermēs as the protector of flocks, with two wheat stalks before it and carrying in its mouth the caduceus of the god. A talisman or amulet.

PLATE XXVII

GRÆCO-ROMAN GEMS OF THE EARLY EMPIRE (*concluded*)

(*These are all ring-stones,*)

1. Black jasper.
A thunderbolt.
2. Slightly convex yellow chalcedony, in collection of Prof. Herschel Parker, New York.
The forepart of a stag issuing from a shell. Inscription, LPF, the owner's initials.
3. Carnelian, with whitish variations, in collection of W. Gedney Beatty, New York.
A peculiarly complicated gryllus; the body, a ram's head with a Seilēnos mask for the breast, the head, that of a goat, the legs, a bird's, and the tail, which issues from the ram's mouth, made up of a wheat ear, a dolphin's tail, a peacock's head, and two flowers. The cutting shows the méplat style, where the whole design is sunk in the stone. A talisman or amulet.
4. Red jasper, in collection of W. Gedney Beatty, New York.
Gryllus made up of a Seilēnos mask and ram's head body, bird's legs, a horse's head, and a wheat ear for a tail. It carries a cornucopia and a palm-branch. A talisman or amulet.
5. Nicolo, in Berlin Museum (Catal. No. 8348).
Forepart of an elephant carrying a torch in his trunk and issuing from a shell. A talisman or amulet.
6. Red jasper, in collection of H. L. Pangborn, New York.
An eagle, with a wreath in its bill, between two legionary standards. Evidently the signet of some legionary officer. Certain scratches on the surface of the gem that look like numerals and seem to have been made by a later hand may have been an attempt by the owner to add the number of his legion. Probably second century work.
7. Convex sardonyx.
A crab with a star between its claws. Inscription, BPETTIΩN (Brettion). The crab is an emblem on the coins of Bruttium, and the gem is evidently a signet of some one of the gens, Brettia, who, doubtless, drew their origin from that part of Italy. (See A. Sanbon's essay in *Corolla Numismatica*, published in honor of Barclay V. Head, citing a gem inscribed, ENNAIΩN.)

8. Mixed red and yellow jasper.

Scorpio holding Libra in its claws. Astrological device aimed to gain for the wearer the influence of both signs.

9. Nicolo, in collection of W. Gedney Beatty, New York.

A very crude figure, perhaps Cupid, perhaps a mouse, driving a chariot to which a cock is hitched. Probably second century work and may belong to the later Empire.

10. Dark red carnelian.

A man and woman, fully draped, with clasped hands and holding a stalk of wheat. A marriage ring-stone, emblematic of the ceremony of the *confarreatio*.

ROMAN GEMS OF THE LATTER HALF OF THE SECOND CENTURY

(These, with the exception of the last on the plate, are all ring-stones.)

11. Convex carnelian, in Berlin Museum (Catal. No. 7572).

Hercules, unbearded and with crude suggestions of floating drapery, carrying the Erymanthian Boar on his shoulder. Before him is the jar in which Eurystheus hid himself in fright. The work is characteristic of the second half of the second century.

12. Carnelian, in Berlin Museum (Catal. No. 7588).

Two pigmies, with spears and shields, in battle with two cranes. Characteristic work of second half of the second century.

13. Carnelian (slightly calcined), from near Damascus.

A horse with a palm-branch in its mouth, symbolic of victory. Inscription, A T P, probably an abbreviation of the horse's name, *Ἀτρυτώνη* (The Unwearied), a title of Athēna. *Ἀτρίαντος* (Unconquered), *Ἀτρεστος* (Fearless), and *Ἀτρεύς* are also possible names.

14. Heliotrope, in collection of Thos. E. H. Curtis, Plainfield, N. J.

Hēlios, with crown of rays, driving his four-horse chariot. Characteristic work of latter part of the second century. The subject is common and the stone also characteristic.

15. Carnelian, in Berlin Museum (Catal. No. 7575).

Bellerophōn, mounted on Pēgastos, hovering over the Chimaira, at which he aims his spear. This gem is much better work than the four preceding and may date from the early part of the second or, even, from the first century. The

subject was probably the device on the signet of Pallas, the freedman of Claudius. (See Chap. III of Part III, above.)

16. Carnelian, in Berlin Museum (Catal. No. 7675).

A muse, with drapery around her hips and legs, seated in a chair before an ithyphallic Priapos who stands on a low column, and holds a horned mask in his hand. Characteristic work of latter part of the second century.

17. Red jasper, in Berlin Museum (Catal. No. 6855).

Hercules, bearded, with floating lion's skin and club over his shoulder, leading Cerberus. Before him is a warrior in corselet, with sword and spear and wearing a crown, doubtless one of the later emperors, dragging by the hair a barbarian captive with a Phrygian cap. In the middle is an eagle with a wreath in its beak and, above, a star and a half-moon. Characteristic subject and style of the later Empire.

18. Convex carnelian, in Berlin Museum (Catal. No. 3033).

Erōs binding the wounded foot of a lion. Behind the latter is a tree. Crude work but possibly even as early as the first century A. D.

19. Nicolo, in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 2096). Too large for a ring-stone.

One of the later emperors (Commodus or, perhaps, Marcus Aurelius), wearing a tunic and mounted on a horse with a panther-skin saddle-cloth, is casting his javelin at a tiger. The work is good for the period; such as might be looked for on a large, ornamental piece worn by some immediate attendant of the Emperor.

PLATE XXVIII

GEMS OF THE LATER EMPIRE (*continued*)

(*These are ring-stones except when otherwise stated.*)

1. Carnelian (upper part restored in gold), in Berlin Museum (Catal. No. 2340).

Portrait-head. Work of the second century.

2. Chalcedony, in Berlin Museum (Catal. No. 2342).

Portrait-busts of a man and woman. Work of the third century.

3. Nicolo, in Berlin Museum (Catal. No. 7011).

Bust-portrait of Elagabalus crowned with a laurel wreath.

4. Banded sardonyx, in Berlin Museum (Catal. No. 7012).
Bust-portrait of an emperor of the third century, crowned with a laurel wreath; probably Balbinus.
5. Carnelian, rather large for a ring-stone; unknown owner.
Portrait-bust of Philippus the elder, his wife, Otacilia, and their son, the younger Philippus. Third century work.
6. Lapis lazuli; unknown owner.
Bust-portrait of one of the later emperors; perhaps Constantius II, Gratianus, or Honorius. Typical example of the last efforts of the glyptic art in the fourth century.
7. Carnelian, rather large for a ring-stone; unknown owner.
Bust-portrait of Decius. Third century work.
8. Lapis lazuli; unknown owner.
Portrait-head of one of the later emperors crowned with a laurel wreath. An example of the expiring efforts of glyptic art.
9. Beryl, formerly among the Marlborough gems.
Bust-portrait of Julia Domna, wife of Septimius Severus. Work of about 200 A. D.
10. "Onyx" (probably chalcedony), rather large for a ring-stone; presented in 1825 by the Emperor Francis I to Pope Leo XII.
Portrait-busts of a Christian family of the latter part of the third century, father, mother, and daughter. Inscription, IC ⬢E⬢C (*εἰς Θεός*), Z⬢H (*ζωή*), and EVTVXI ΠΑΝΧΑΡΙ ΜΕΤΑ ΤΗΣ ΚΥΡΙΑΣ ΒΑΣΙΛΙΣΣΗΣ ΚΑΙ ΠΑΥΛΙΝΑΣ (*Εὐτύχι Πάνχαρι μετὰ τῆς κυρίας Βασιλίσσης καὶ Παυλίνας*): at once a family portrait gallery, a confession of faith, and a talismanic invocation of good luck.
11. Carnelian (chipped).
Portrait-bust of a youth crowned with a laurel wreath and with an indistinguishable object over his shoulder. Third century work.
12. Carnelian, with whitish striations, from Cattaro.
Portrait-bust of a woman. Third century work.
13. Yellowish carnelian.
Two masks, back to back. Probably the Janus head. Second or third century work.
14. Carnelian.
A dog running. Inscription, ATTICA (Attisa); doubtless the animal's name. Probably second century work.
15. Carnelian.
An eagle on an altar from which a stalk of wheat rises.

16. Carnelian.

Clasped hands holding a caduceus and two stalks of wheat. Inscription, KF; the initials of the two parties to the *confarreatio*.

17. Brownish-red sard.

Bacchus, beardless and nude, one hand resting on his thyrsus, the other holding a pitcher. Inscription, ΤΡΟΦΙΜΙ-ΩΝΟ, the owner's name in the genitive with the final sigma left out for lack of space.

18. Carnelian (slightly calcined).

Athēna, one hand resting on her shield beside which stands her spear, the other bearing a winged Victory.

19. Carnelian.

Diana, in short tunic and floating scarf, advancing, having just loosed the arrow from her bow. Over her shoulder is what may be meant for a spear, and at her feet runs a hound. The whole is an example of the crudest kind of late work,—merely a few gougings with the wheel.

20. Yellow carnelian.

Roma or some "City," draped and with helmet and spear, writing on a shield which rests on a low column.

21. Brownish-red sard, in collection of W. Gedney Beatty, New York.

Three deities in a row; in the middle, the Olympian Jupiter enthroned, with garment about his legs, his eagle at his feet, one hand holding a winged Victory, the other resting on his sceptre. Before him stands an unidentified female deity, draped and holding a patera over an altar; behind is Spes holding out her tunic with one hand, the other raised and holding a bud. Crude work of the late second or third century.

PLATE XXIX

GEMS OF THE LATER EMPIRE (*concluded*)

(*These are all ring-stones except when otherwise stated.*)

1. Carnelian, in the collection of Prof. Herschel Parker, New York.

Castor and Pollux, each resting on his spear, and nude save for a mantle thrown over his arm. A crude representation of a star is on the forehead of each. Late work of the cheapest character, probably of astronomical purport.

2. Carnelian.

A peasant, with a sheep's or goat's skin cloak, reaping grain. Very crude, late work.

3. Carnelian.

A dog pursuing a rabbit. A few crude gougings of the wheel.

4. Banded agate (calcined).

A goat-fish (Capricornus) with a cornucopia over its back and a dolphin beneath. Astronomical and luck-bringing symbols. Probably late second century work but possibly dating from Augustan times.

5. Carnelian.

A hand holding symbols; the caduceus of Mercury, the wreath of Victory, the cornucopia of Fortuna, an augur's lituus, and what seems to be a flower. Crude work but an excellent example of the desire to combine the luck-bringing attributes of many deities.

6. Carnelian.

Early Christian. The Good Shepherd with a lamb in his arms and two standing at his feet. At the left is a crudely designed object which I am unable to identify. Inscription, XP, the abbreviation of Christos.

7. Carnelian (chipped).

Victory, winged, offering a wreath to Fortuna, who carries her cornucopia and rudder. Very crude late work.

8. Carnelian.

Cupid hanging a sword on a trophy. May be poorer work of earlier imperial times.

9. Red jasper.

Cupid singeing a butterfly (Psychē) with his torch. May be poorer work of earlier imperial times.

10. Green jasper, in collection of H. L. Pangborn, New York.

Capricornus with a cornucopia on its back and Scorpio. Astronomical signet combining the two signs.

11. Dark green jasper.

A lion (for the sign Leo) with a star above him and a crescent beneath. On the back of this gem is a palm-branch and the letters, ΙΑΩ (Iaō), the ineffable name of the Jews, an epithet of the supreme god of the Gnostics. The owner was, doubtless, a member of one of their sects. He seems to have been disposed to consider astronomical influences and, perhaps, not averse to what aid he might obtain through the lion of Mithras.

12. Carnelian, in the Museum of Gotha.

Early Christian. The sacrifice of Isaac, who kneels before an altar beside which stands Abraham, unbearded, holding the victim by the head and raising the sacrificial knife. Behind him a descending angel stays the blow. Beneath him a ram stands under a tree. Above, and reversed so as to be viewed on turning the stone about, are the attendants of the patriarch, one of whom holds a saddled horse by the rein.

13. Heliotrope, in collection of Thos. E. H. Curtis, Plainfield, N. J.

Mithraic. A lion, emblematic of the Sun, pulling down a bull, emblematic of the Earth, the whole signifying the power of Mithras. Inscription, ΝΙΚΗ (victory).

14. Deep red carnelian (chipped), in collection of W. Gedney Beatty, New York.

Mithraic. A lion carrying in its jaws a bull's head, with the same significance as No. 13 above.

15. Carnelian (chipped).

An Egyptian asp crowned with a lotos flower. Inscription, ΕΙC Ζ — C CΑΡΑΠΙC (*Eîς Ζεύς Σαράπις*), with the last two letters below and reversed. A signet attributable to one of the Egyptian Gnostic sects.

16. Yellow jasper (chipped).

Hekātē, a triple figure, each of the three heads crowned with a modius. Four of the six hands seem to hold torches, the other two, swords (?). Inscription, ΙΑΩ, and, around the beveled edge of the stone, —ΒΡΑCΑΧ CΑΒΑΩ ΑΙΑΩ. The first part of the latter is clear, viz.: Abrasax, the Gnostic Pantheos, and Sabaō, for Sabaoth, another title of the same divinity. The balance of the letters are of doubtful import. The device itself is a strange one for a Gnostic gem. On the back (not figured) is a worshipper kneeling before an altar upon which rises a serpent. This, it has been suggested, is modern, but I am inclined to believe it also genuine ancient work.

17. Blackish jasper, in collection of Prof. Herschel Parker, New York.

Bust of Hēlios crowned with rays. On one side stands a winged Victory offering a wreath, on the other, Fortuna with cornucopia and rudder. Inscription, ΕΥΤΥΧΗC ΠΟΥ—ΟC (?), evidently an invocation of good fortune to some one, but the letters are too badly worn to make a rendering of the name possible.

18. Green jasper.

Cupid bound to a column which is surmounted by a griffin, sacred to the Sun-god, with its paw on a wheel. Inscription, ΔΙΚΑΙΩC (*δικαίως*). In the Mithraic Brotherhood the symbol of a captive bound to a column surmounted by a griffin, was one of the signs given "To him that overcometh" and signified that the neophyte had passed through the trials preceding initiation. The inscription, "Justly" or "I have deserved it," often accompanies the device. In the present case the substitution of a Cupid is interesting and suggests the signet of some love-lorn member of the cult with a sense of humor.

19. Brownish agate sprinkled with red, perhaps the coralloachates (coraline agate) or the pontica (Pontic gem) of Pliny.

Nude female figure holding two torches, one raised and one lowered, symbolizing the rising and setting of some Heavenly body, usually the Sun. In the Mithraic cult the female element of Mithras was Mitra, a development of the Phœnician Mylitta. She was the "Morning Star," a genius presiding over love and directing the harmonious movement of the other planets. It seems plausible that this gem embodies that idea. Very crude late work.

20. Green and brown-red jasper.

(a) The Abraxas god with human body in a corselet, a cock's head, and serpent's legs, a shield on one arm, and a dart in the other hand. Inscription, ΙΑΩ, the ineffable name of the Jews. Other seeming characters appear scattered in the field.

(b) The child, Horus, the Harpokratēs of the Greeks, seated on a lotos flower, a scourge in one hand and the other raised with finger at his lips. On his head are what may be meant for the two upright plumes worn by many of the Egyptian deities.

21. Red jasper, in Metropolitan Museum, New York (King Coll., Catal. No. 158).

A Gorgōn's head, in full face, with wings and surrounded by serpents. Inscription, ΑΡΗΓΩ ΡΩΡΟΜΑΝΔΑΡΗ (I defend Rōromandarēs). A good example of the later talisman or amulet.

22. Convex plasma or green chalcedony.

The Agathodaimōn; a serpent with a lion's head (it looks somewhat like a man's) crowned with ten rays. Before it are

the three S curves transfixed by a bar, probably a Gnostic conventionalization of the serpent-twined staff of Æsculapius. Inscription, ΔΕΙΩ (awe or reverence). On the back of the stone (not figured) is the inscription, ΧΝΟΜΙC (the name of the Agathodaimōn).

23. Yellow jasper.

The Mithraic lion. Inscription, ΑΠ ΙΦ, in two lines, perhaps part of a name, perhaps of some charm.

24. Green jasper.

A Gnostic "Power" or astral genius, with four wings and a tail, bearing sceptres and, on its head, the sacramental table. It also seems to be phallic but the crudeness of the work leaves this doubtful. Around the back are letters or numerals of uncertain meaning.

25. Green jasper with two or three reddish spots.

A beetle, symbolizing eternity, encircled by a serpent with his tail in his mouth, symbolizing the Sun. On the back is inscribed ΙΑΩ (Iaō), the ineffable name.

26. Green jasper with reddish brown shadings, in collection of W. Gedney Beatty, New York.

Horus (Harpokratēs), with scourge and finger at lips, seated on a lotos flower. For a border, the Sun-serpent with its tail in its mouth. Inscription, ΙΑΩ and, apparently, the seven vowels. On the back is, also, a long inscription but so battered as to be undecipherable.

27. Brownish red sard.

The Agathodaimōn, or lion-headed serpent, with a crown of twelve rays. Inscription, a circle of letters, some of them vaguely cut and the whole untranslatable.

28. Green jasper, in collection of Prof. Herschel Parker, New York.

(a) A lion bearing on its back a swathed mummy above which rises the upper part of the jackal-headed Anubis, conductor of the dead. On either side stand draped deities with plume head-dresses and hands raised as if in adoration. Here we have the dead Gnostic borne to his reward by the Mithraic lion under the conduct of Anubis.

(b) Inscription, ΒΙΒΙΟΥC (uncertain meaning), the seven vowels, and ΙΑΩ, the ineffable name.

PLATE XXX

SASSANIAN, BYZANTINE, MEDIÆVAL, AND RENAISSANCE GEMS

(These are ring-stones except when otherwise stated.)

SASSANIAN GEMS

1. Carnelian, from Armenia.

A deer cropping herbage and giving suck to a fawn. Inscription in Syriac, for the translation of which I am indebted to Professor A. V. W. Jackson of Columbia University. It is descriptive and reads, *Phatā b^e-rabuwa* (young one at nursing). The gem seems to be contemporary with the early Sassanian stones.

2. Lapis lazuli (chipped), in collection of W. Gedney Beatty, New York.

A Sassanian king, in a long tunic and with the typical triangular arrangement of his braided hair rudely suggested, holding a sword with which he menaces a lion standing on its hind legs before him. Beneath the lion are what seem to be two Pehlevi letters.

3. Slightly convex carnelian.

A woman seated, fully clothed and with hair in two long braids, holding in her lap a child, closely swaddled. Probably some queen with an infant prince. Inscription in Pehlevi letters which has, thus far, proved untranslatable.

4. Convex carnelian, in collection of W. Gedney Beatty, New York.

A lion's head with stag's antlers.

5. Strongly convex garnet, in collection of W. Gedney Beatty, New York.

Representation of what may be meant for a standard, a monogram or, possibly, a fire-altar. A very common type of Sassanian seal which has never been satisfactorily explained.

6. Strongly convex garnet, from Cyprus, in Metropolitan Museum, New York (Cesnola Coll., No. 241).

Portrait-bust of a bearded Sassanian king wearing an ornamented tiara and with the back hair in six braids spread out in triangular form. Inscription, in fine Pehlevi letters, read by Professor Jackson of Columbia University, *Sartik*; apparently the name of the owner, a Persian official who used the king's portrait as his seal.

7. Somewhat cloudy chalcedony, cut down through the boring from a hemisphere or cone, in Metropolitan Museum, New York (King Coll., Catal. No. 6).

Bust-portrait of a bearded Sassanian king in full front, wearing a tiara set around with gems, a necklace and a garment elaborately ornamented with stars. The hair bunches out at both sides, suggesting two triangular arrangements of braids. Inscription, in fine Pehlevi letters, part of which has been translated by Professor Jackson, *Shāh-i Airān* (King of Persia). The name has, thus far, proved a puzzle, but Dr. King catalogues the portrait, on the strength of coin resemblances, as that of Chosroes II; "Nushirwan the Just."

MEDIÆVAL AND BYZANTINE GEMS

8. Yellowish chalcedony, in Metropolitan Museum, New York (King Coll., Catal. No. 64).

An old man, bearded, wearing a long robe, a cloak, and a sort of turban, and leaning on a staff before a nude boy seated on a rock (?) with his arm raised as if declaiming. Above the boy's head is a cloud, perhaps the shechinah of Divinity. The picture is explained by Dr. King as Christ disputing before the doctors. The style suggests the cameo; "Noah under his vine," in the Bibliothèque Nationale, Paris, which was held by Chabouillet to be early mediæval work. Also it is not unlike the religious Byzantine coinage of John Zimisceus.

9. Sapphire, formerly in the Waterton Collection and now, I believe, in the British Museum.

Head of the Madonna, wearing a veil thrown back. Probably late Mediæval work dating shortly before the beginning of the Renaissance. The stone, set in a large ring, was found at Hereford, England, and, from the motto cut in Lombard letters around the bezel, "Tecta lege lecta tege," it was held to have belonged to Matthew Paris; a quite unwarrantable assumption. It seems surely of later date than the thirteenth century and the motto was a not uncommon one on mediæval seals.

10. Rock crystal (chipped), from Sicily, in collection of H. L. Pangborn, New York.

Christ with hand raised in blessing over a small figure before him who bends his or her knees slightly. Behind him

part of another small figure shows and, above it, in the field, a cross potence. Before the last figure is what appears to be a letter, \mathfrak{P} . The work is very crude. I venture, as a guess, that it is Norman Sicilian under Byzantine influence. It is more than doubtful if this or the following gem was used as a ring-stone.

11. Rock crystal (chipped), from Sicily, in collection of H. L. Pangborn, New York.

The Madonna seated with the infant, Jesus, on her lap. Before her stands St. Joseph, bearded. Around the head of each is a halo and above them a cross potence. Probably Norman Sicilian work under Byzantine influence.

12. Red jasper, in Metropolitan Museum, New York (King Coll., Catal. No. 221).

Hercules strangling the Nemean Lion. On the back of the stone is the inscription $\lambda\lambda\lambda\ \mu\mu\mu$, the subject being the charm prescribed by Aléxander of Tralles as a protection against colic. The gem is probably Mediæval work.

RENAISSANCE GEMS

13. Carnelian, in Metropolitan Museum, New York (King Coll., Catal. No. 218).

Omphalē walking, nude, save for the lion-skin of Hercules thrown about her, and bearing his club over her shoulder. Inscription, $\epsilon\lambda\lambda\eta\eta\eta$, which Dr. King suggests may be, if genuine, a signature of Alexander Cesati, known as "Il Greco." M. Babelon endorses similar signatures as of that artist. The work is characteristic of the Renaissance or later treatment of classical subjects.

14. Unknown stone, too large for a ring. Owner unknown.

A hero, in tunic and cloak, wearing a helmet with a crest and plume. He is ploughing with two oxen with garlands about their necks, and gazing, with raised arm, toward twelve birds flying above them. A Renaissance picture of Romulus seeing the twelve vultures and also marking out with a furrow the bounds of the city he is to build. Inscription, $M. ARVNTINI. TAV$, perhaps the signature of some member of the Taverna family of Milan, though seemingly of neither Tortorino nor Giuliano.

15. Carnelian, in Berlin Museum (Catal. No. 8867).

Athēna, in a helmet and a long tunic slit up the thigh in the Renaissance style, standing before a low column, one hand resting on her shield, the other holding a nude, winged Nikē who is offering her a wreath. The whole would be quite impossible in ancient work.

16. Slightly convex carnelian, too large for a ring-stone, in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 2404).

A number of Roman soldiers, armed in both Greek and Roman style and bearing three standards, bringing Jugurtha as a prisoner before Sulla, who, dressed in his toga, is seated in a curule chair set on a square platform. Behind him stands another officer with one hand on his shoulder. Beyond the group is a colonnade. A characteristic Renaissance composition.

17. Carnelian, in Metropolitan Museum, New York (King Coll., Catal. No. 109).

Head of Medousa, three-quarter face, with wings and serpent locks clustering beneath the chin. Characteristic work of the Renaissance.

18. Carnelian, veined with crimson, popularly known as a blood-agate, in Metropolitan Museum, New York (King Coll., Catal. No. 225).

Hercules, with lion-skin over his head and fluttering about him, his club thrown behind, and one foot resting on a half nude female figure with wild hair personifying Mother Earth, strangles above her in his arms, her son, the giant, Antæus. The design is full of the violent action characteristic of non-classical work.

19. Slightly convex yellowish carnelian, in Metropolitan Museum, New York (King Coll., Catal. No. 172).

A woman, fully draped, embracing a man with mantle over one shoulder and falling about his hips and thighs. Dr. King thinks the picture is of the parting of Coriolanus and Volumnia. Characteristic Renaissance treatment.

20. Black jasper, in Berlin Museum (Catal. No. 8874).

Sisyphus, nude and bearded, rolling his great rock up the hillside. Dr. King figures this gem (Pl. XLI, 11, of his *Antique Gems and Rings*) and describes it as of Roman date, but everything about it bespeaks the Renaissance.

PLATE XXXI

RENAISSANCE GEMS (*concluded*)

(*These are ring-stones with the exception of the large plaque, No. 12.*)

1. Carnelian, in Berlin Museum (Catal. No. 8838).

The judgment of Paris, who, seated under a tree, with cloak about his hips and shepherd's crook, gives the apple to Aphroditē, whose garment falls over one arm and about her hips. Erōs stands before her, and, beside, Hēra, nude, reaches out in vain for the prize. Her peacock, with spread tail, stands near, and, behind them, Athēna, her helmet, spear, and shield on the ground, is casting aside her garment.

2. Carnelian, in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 2337).

A Bacchic feast with many minute figures of satyrs and nymphs. Above them two flying Cupids hold a canopy. In the exergue is a man fishing; supposed to be the rebus signature of Piero Maria da Pescia, the intimate friend of Michael Angelo, whose signet this ring is thought to have been.

3. Agate of two shades, in Metropolitan Museum, New York (King Coll., Catal. No. 85).

A male and female Tritōn swimming together, the former with a steering oar over his shoulder. The figures are cut in the dark part of the stone, the water in the more transparent light shade. Dr. King describes it as "A cinque cento copy of a well-known gem in Florence." If it be a direct copy, the Florentine gem must be also cinque cento, as no ancient artist would have treated the subject in this way.

4. Convex pale brownish chalcedony, in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 2319).

A female head, with laurel crown and necklace. Furtwängler considers it to be Hellenistic; the portrait of a Ptolemaic queen, probably Arsinoë III, but the authorities at Paris hold it a Renaissance work, a judgment which the character and treatment of the head lead me to concur in most emphatically.

5. Carnelian, in Boston Museum (No. 99.118).

A beardless youth seated on a stone decorated with a ram's head, and a bearded man with wild hair standing before him. Both are playing on the single pipe. Between them

runs a Cupid and above, in the background, is a Herm statue of Pan. All the figures are nude.

6. Convex amethyst, in Bibliothèque Nationale, Paris (Coll. Chabouillet, No. 2077).

Portrait-bust of a beardless, bald-headed Roman, the toga showing about his shoulders. It has been called a portrait of Cicero. Inscription, ΔΙΟΚΚΟΥΠΙΔΟΥ. Both head and signature are Renaissance work, probably of the seventeenth century; a copy, Furtwängler thinks, though I can hardly believe a very accurate one, of a genuine ancient gem.

7. Heliotrope, in Berlin Museum (Catal. No. 8844).

Apollō, with cloak about his neck and around his legs, seated with his lyre on a low, garlanded column. Before, leaning on a staff, stands a fully draped woman, doubtless a Renaissance conception of a Muse.

8. Convex carnelian, in Berlin Museum (Catal. No. 8937).

Head of an emperor, perhaps Augustus in his later years, wearing a laurel crown with fillets.

9. Carnelian, in Berlin Museum (Catal. No. 8837).

Hēphæstus snaring in his net Arēs and Aphroditē, who lie in each other's arms. Cupid lies asleep before them.

10. Brownish yellow jasper, in Berlin Museum (Catal. No. 8835).

Silēnus, nude and drunken, carrying a lyre and riding on an ass in the midst of a procession of Bacchanals.

11. Light convex carnelian, in Berlin Museum (Catal. No. 8836).

Four women making offerings of a ram, fruit, and incense at an altar. One of them is blowing a long horn and, behind her, a child is playing on the double pipes. A tree curves over the group.

12. Large plaque. Unknown stone and owner.

Five riders on prancing horses, attacking with long truncheons a lion and lioness which three dogs pursue. Inscription, VALERIVS . VICENTINVS . F. . This is not the customary signature of Valerio dei Belli (il Vicentino), but the large size of the gem may have rendered his usual abbreviation unnecessary.

13. Convex sardonyx, in Berlin Museum (Catal. No. 8866).

Fully draped woman carrying a jar.

14. Carnelian, in Berlin Museum (Catal. No. 8841).

A bearded man, with mantle falling from his neck, trying to draw toward him a woman, nude save for a floating scarf.

PLATE XXXII

MODERN GEMS

1. Green jasper, property of H. G. Dwight.
Modern Turkish signet. Name of the owner, Omar ben Kassim, with decorative flower motive. On the back is the name of a former owner which has been partly erased.
2. Carnelian, in collection of W. Gedney Beatty, New York.
Mask. Beneath it are a thyrsos decorated with fillets and a torch crossed. Before, is what appears to be an imitation of old Roman ligatured letters. Work of Mariano Macceroni.
3. Lapis lazuli, in collection of W. Gedney Beatty, New York.
Hercules contending with the Nemean Lion. Work of Mariano Macceroni.
4. Brownish chalcedony, formerly in the possession of the late Prof. George N. Olcott, New York.
Jupiter, nude, with sceptre and thunderbolt, standing before an altar upon which perches an eagle. Work, probably, of one of the Lanzis.
5. Carnelian, formerly in the possession of the late Prof. Geo. N. Olcott, New York.
Victory, winged and draped, laying a palm-branch on an altar upon which is also an ear of wheat. Work, probably, of one of the Lanzis.
6. Convex stone which seems to be artificially colored.
Cupid running and playing on the double pipes.
7. Carnelian, in collection of W. Gedney Beatty, New York.
Crudely cut head with a palm-branch before it. Typical cheap forgery.
8. Bloodstone, in collection of Prof. Herschel Parker, New York.
Ajax, nude and beardless, with helmet and shield, seizing Kassandra, who, fully draped, is seated on the pedestal of the Palladium which she embraces. Above is a star. Cable border. A modern Asia Minor forgery.
9. Convex moonstone, owned by the subject of the portrait.
Modern portrait-head, work of Ottavio Negri.
10. Brownish chalcedony.
Orthryadēs, nude, with helmet and shield, seated and writing on one of three shields that are before him. Modern

imitation of the well known ancient subject. (See Pl. XVII, 5.)

11. Slightly convex topaz, in Berlin Museum (Catal. No. 9395).

Head of horned satyr crowned with a vine bearing grapes. Work of Luigi Pichler, signed, ΕΛΛΗΝΟΥ, and probably intended as a forgery of the work of Alexander Cesati (Il Greco).

12. Red jasper, in Berlin Museum (Catal. No. 9334).

Kneeling warrior in full panoply, with sword. Modern imitation of the well known early Roman subject. (See Pl. XVII, 8.)

13. Stone and owner unknown.

Venus seated on a rock, with a mantle about her legs, and fishing for Cupids. She is drawing one up with her line and another, already caught, is in a basket behind her. Inscription, ΦΡ. ΣΙΡΑΗΤΟΣ; the signature of Francesco Sirletti.

14. Convex variegated carnelian, in collection of W. Gedney Beatty, New York.

A youth, wearing a petasos and with a cloak hanging from his shoulders, carrying a spear and holding a horse by the bridle. Said to be the work of Antonio Lanzi.

15. Carnelian, in Berlin Museum (Catal. No. 9235).

Female bust with hair elaborately dressed. Inscription, ΓΗΛΙΟC; an attempted forgery of an ancient artist's signature.

16. Carnelian, in Berlin Museum (Catal. No. 9393).

Venus, nude, standing on a shell drawn by a team of dolphins which she is driving. Inscription, ΠΙΧΛΕΡ; the signature of Johann Pichler.

17. Carnelian, in Berlin Museum (Catal. No. 9401).

Bust of Euripidēs, with the signature of Marchant.

18. Convex aqua-marine, in Metropolitan Museum, New York (King Coll., Catal. No. 100).

Head of Athēna in an Attic helmet decorated with a sea-dragon. Inscription, ΡΕΓΑ; the signature of Rega.

19. Carnelian, in Berlin Museum (Catal. No. 9233).

Head of a Roman matron with elaborately dressed hair and jeweled hair-band. Inscription, ΑΥΛΟΥ; a forgery of the signature of Aulus. Work of Calandrelli.

20. Stone and owner unknown.

Venus, nude and holding out a mantle over a Cupid rid-

ing on a dolphin. Inscription, ΚΑΔΕΣ; the signature of Cades.

21. Chalcedony, now or late in the possession of the New York Charities Organization Society.

Kapaneus, with helmet, shoes, shield, sword, and floating mantle, falling before the wall of Thebes. The thunderbolt which has slain him lies at his feet. Inscription, ΠΥΡΓΟΤΕΛΗΣ; (Pyrgotelēs). A typical example of the Poniatowski forgeries.

22. Slightly convex carnelian, in Berlin Museum (Catal. No. 9396).

Erōs, nude, and Psychē, with butterfly wings and a mantle about her hips, embracing each other. Inscription, Λ ΠΙΧΛΕΡ; the signature of Luigi Pichler.

ALPHABETICAL LIST OF ATTRIBUTES, ASPECTS, AND SACRED OR SACRIFICIAL ANIMALS, TREES AND FLOWERS

Many of these below noted have not yet been found on gems, and, of course, it must be borne in mind that still others, recording special cults of which little is known, may turn up at any time. This list should prove helpful to students in identifying the gems that come into their hands.

- Altar, strewing incense on; Pietas 244.
Altar flame, thrusting hand into; Mucius Scaevola 268.
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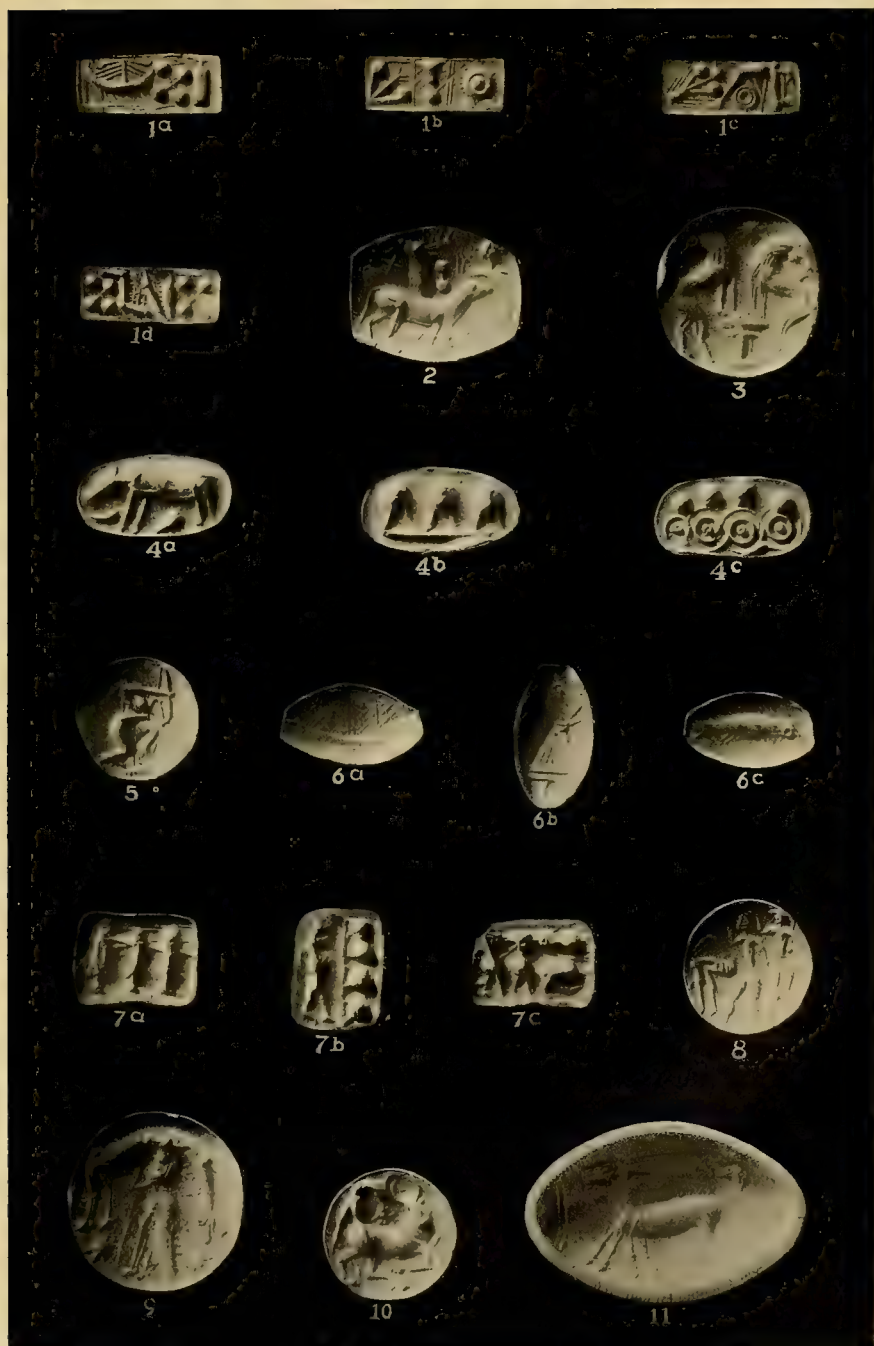
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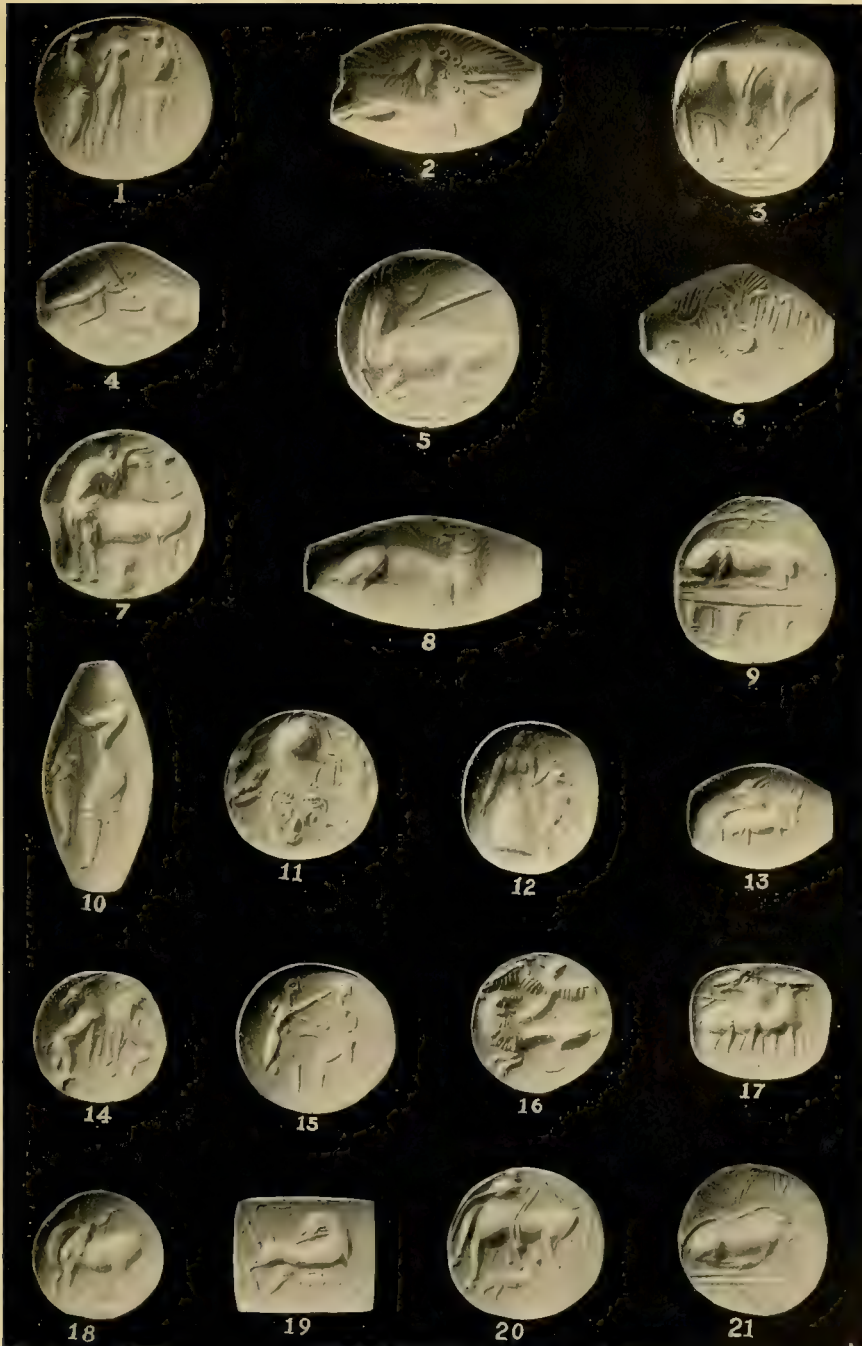
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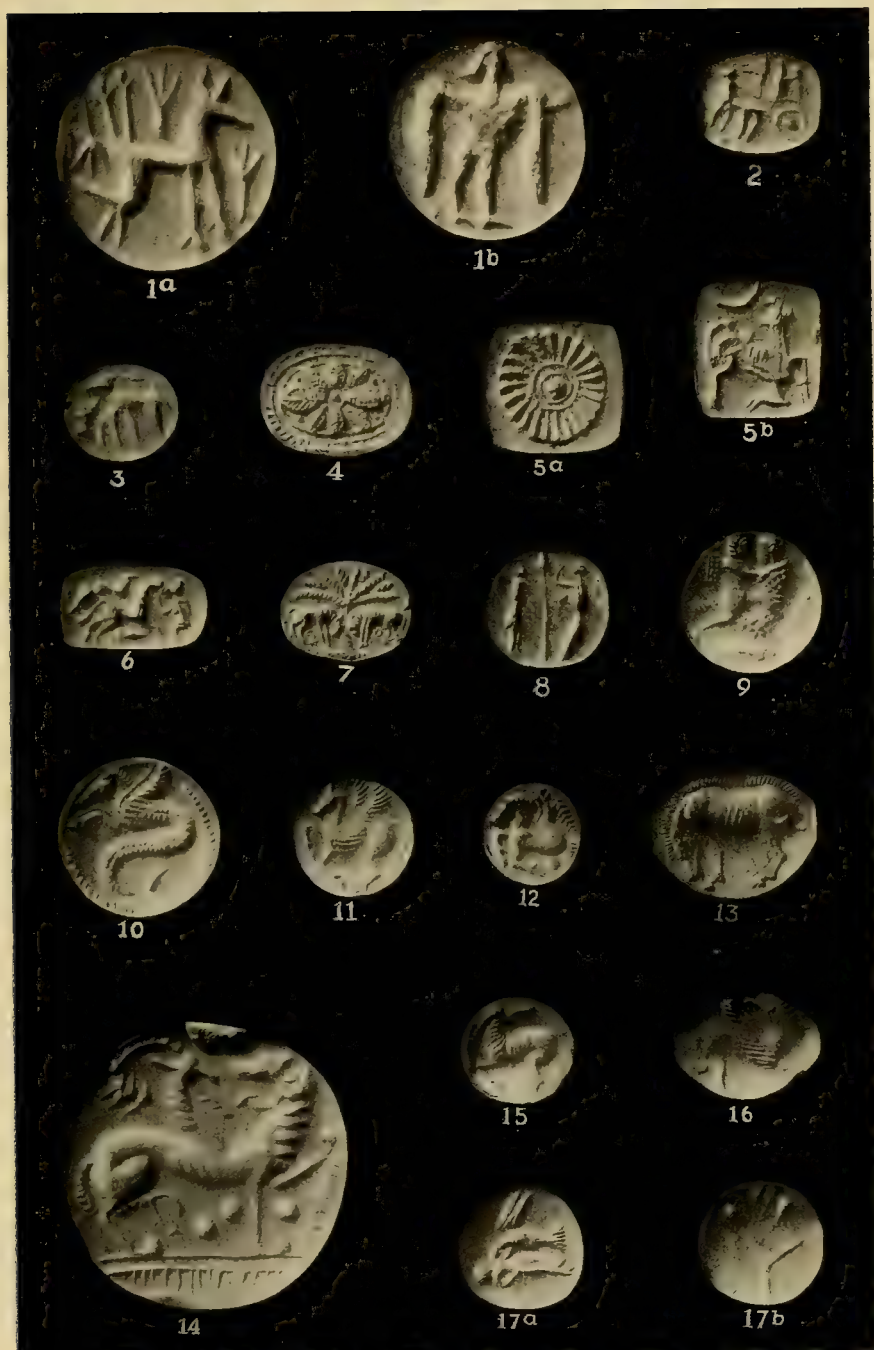
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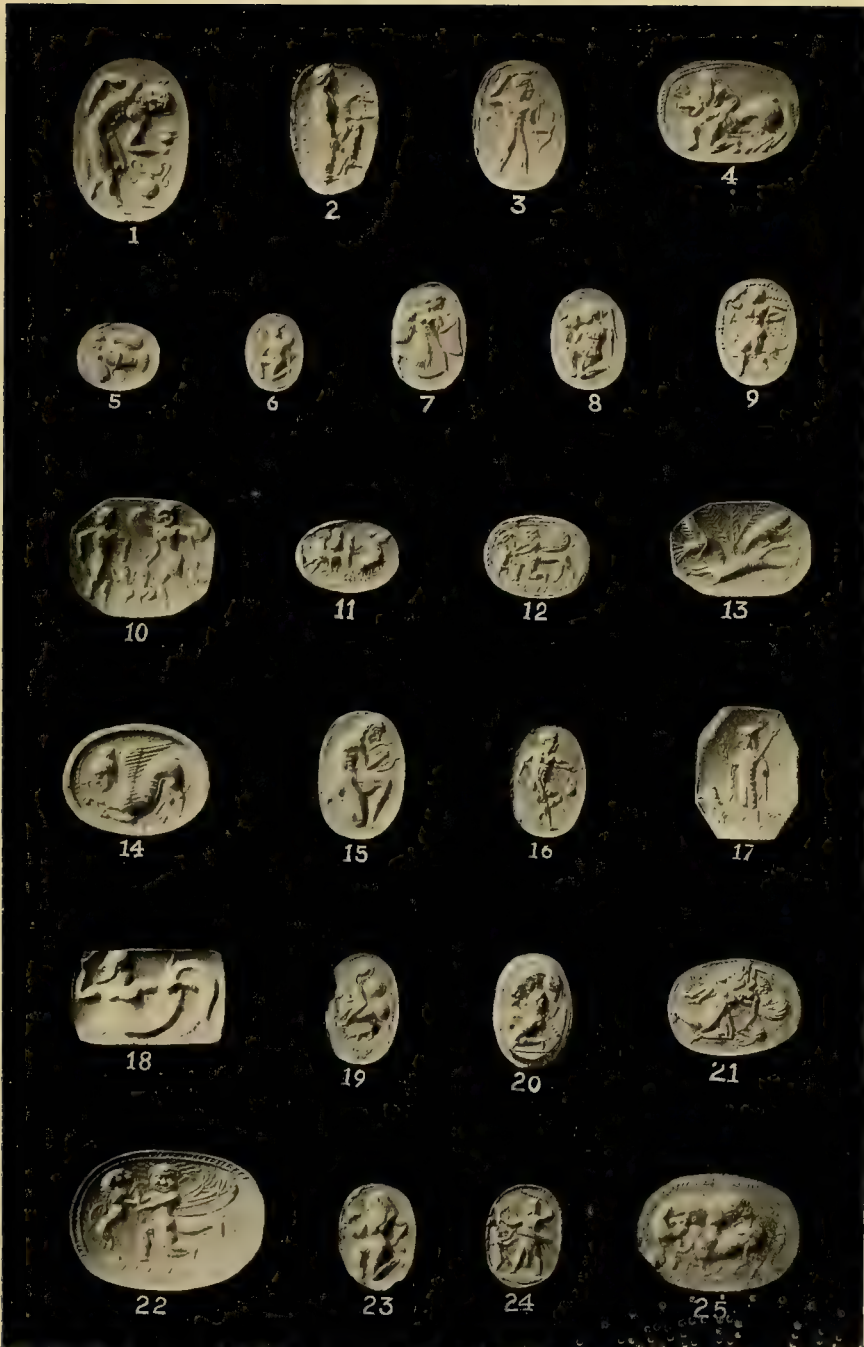
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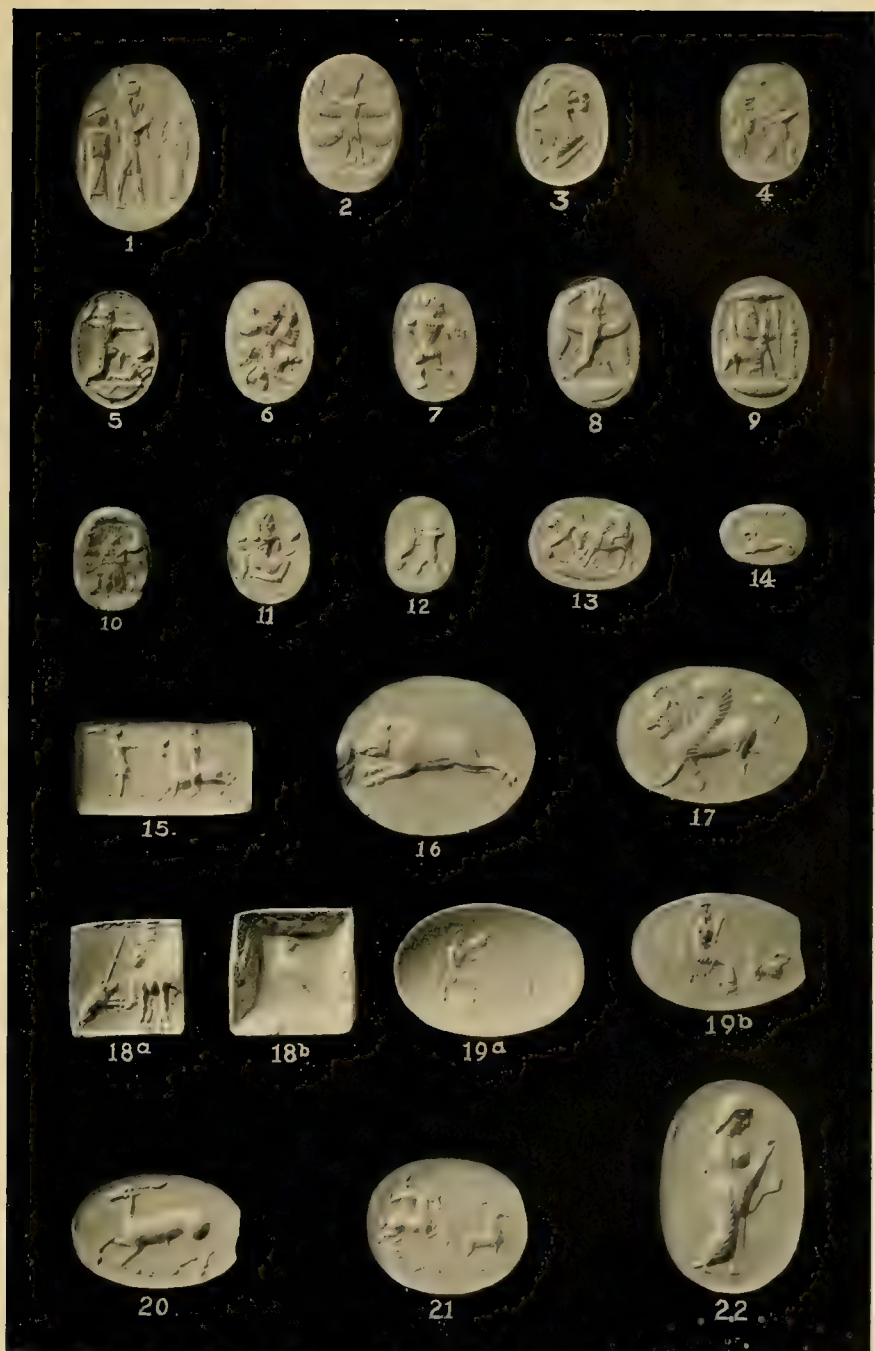
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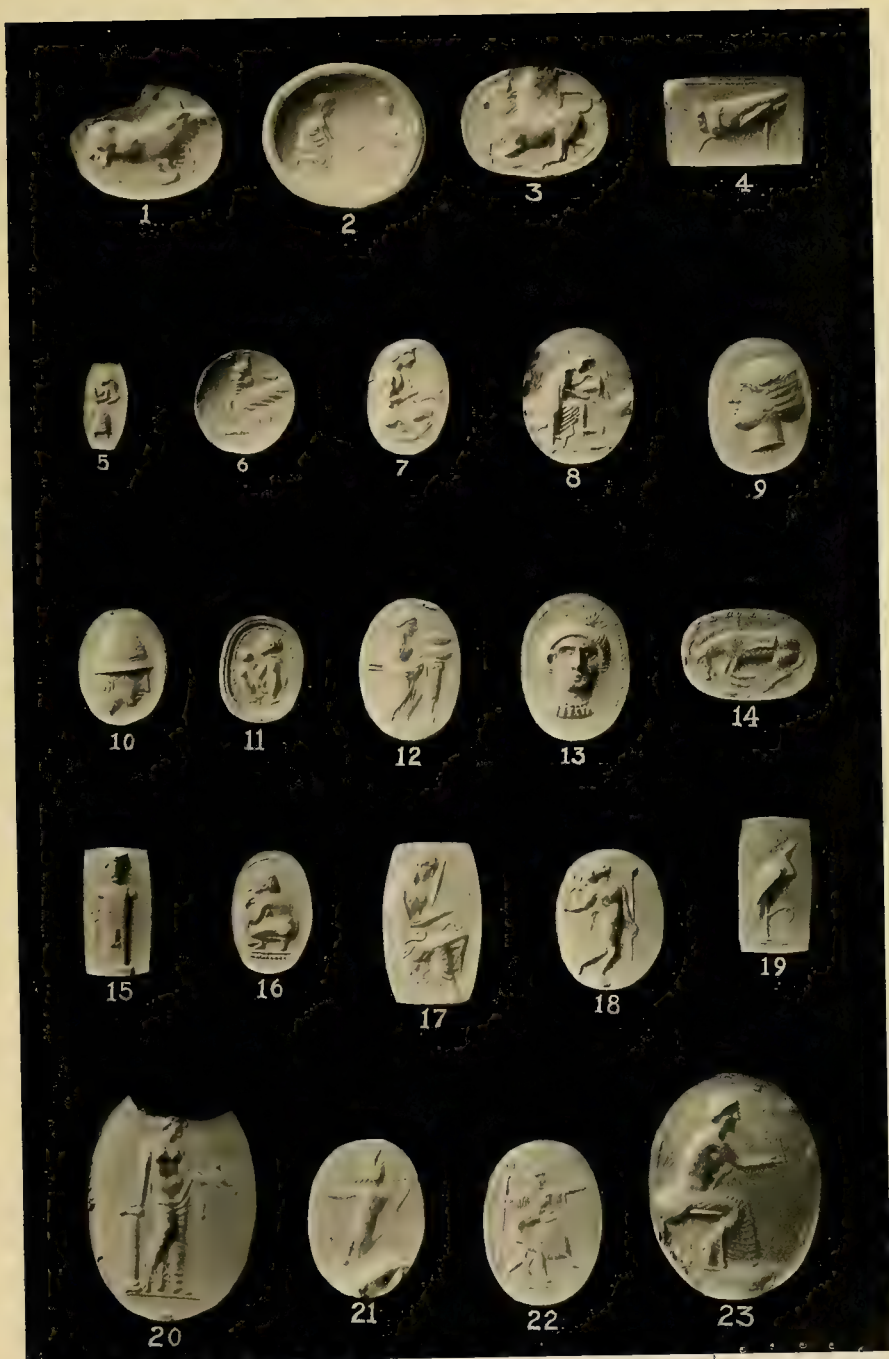
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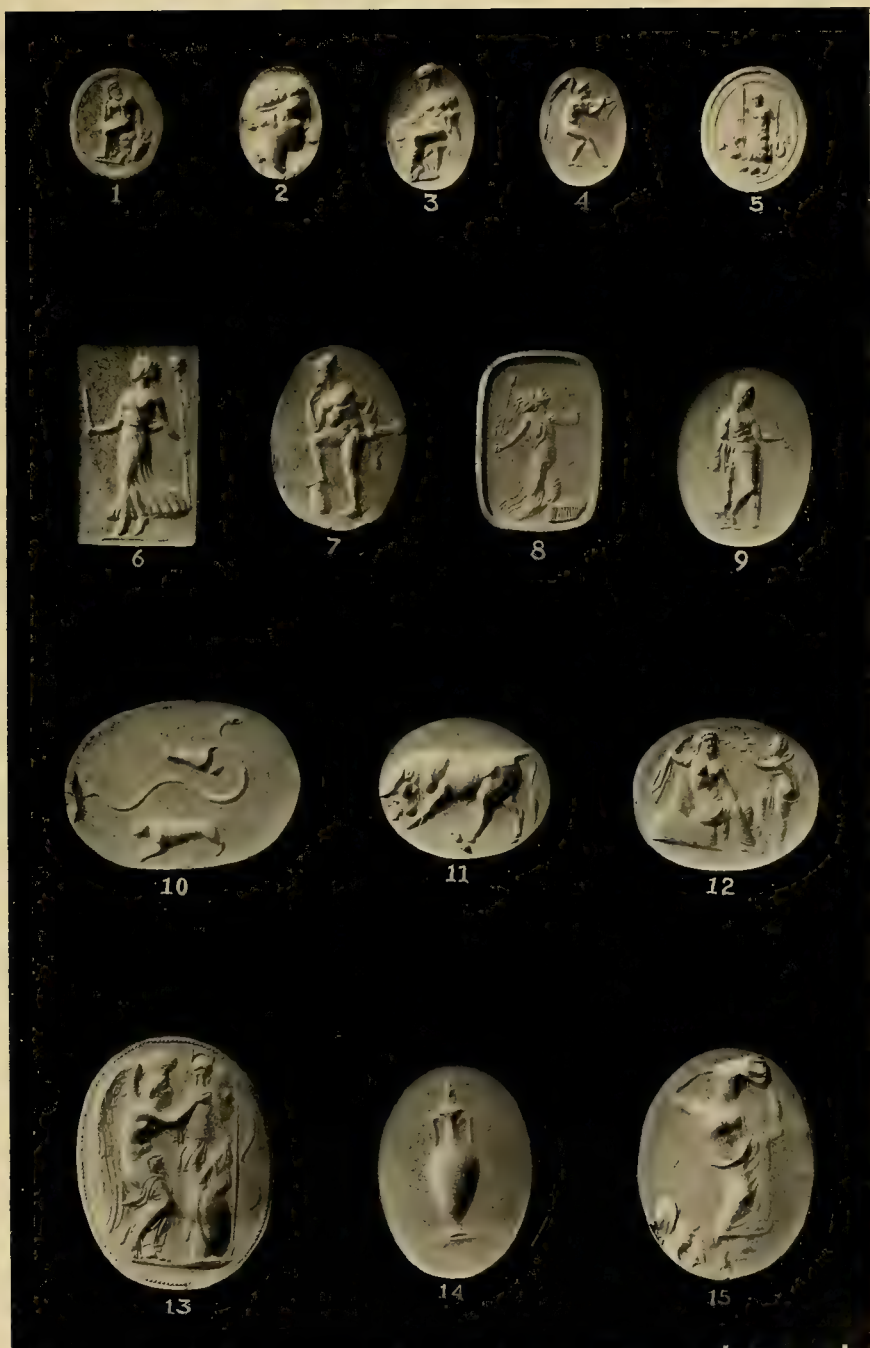
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GEMS OF THE BEST PERIOD



GEMS OF THE BEST PERIOD



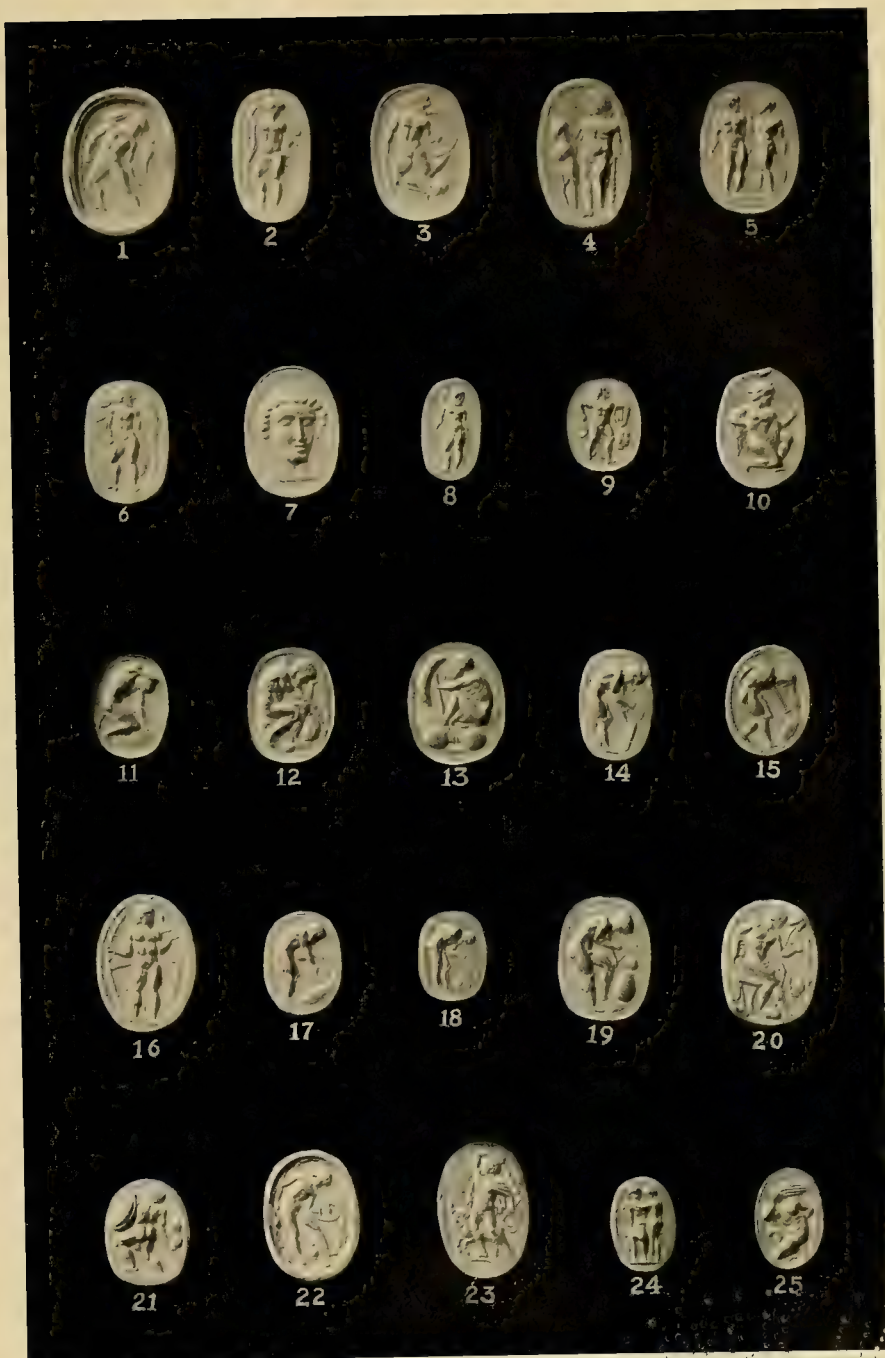
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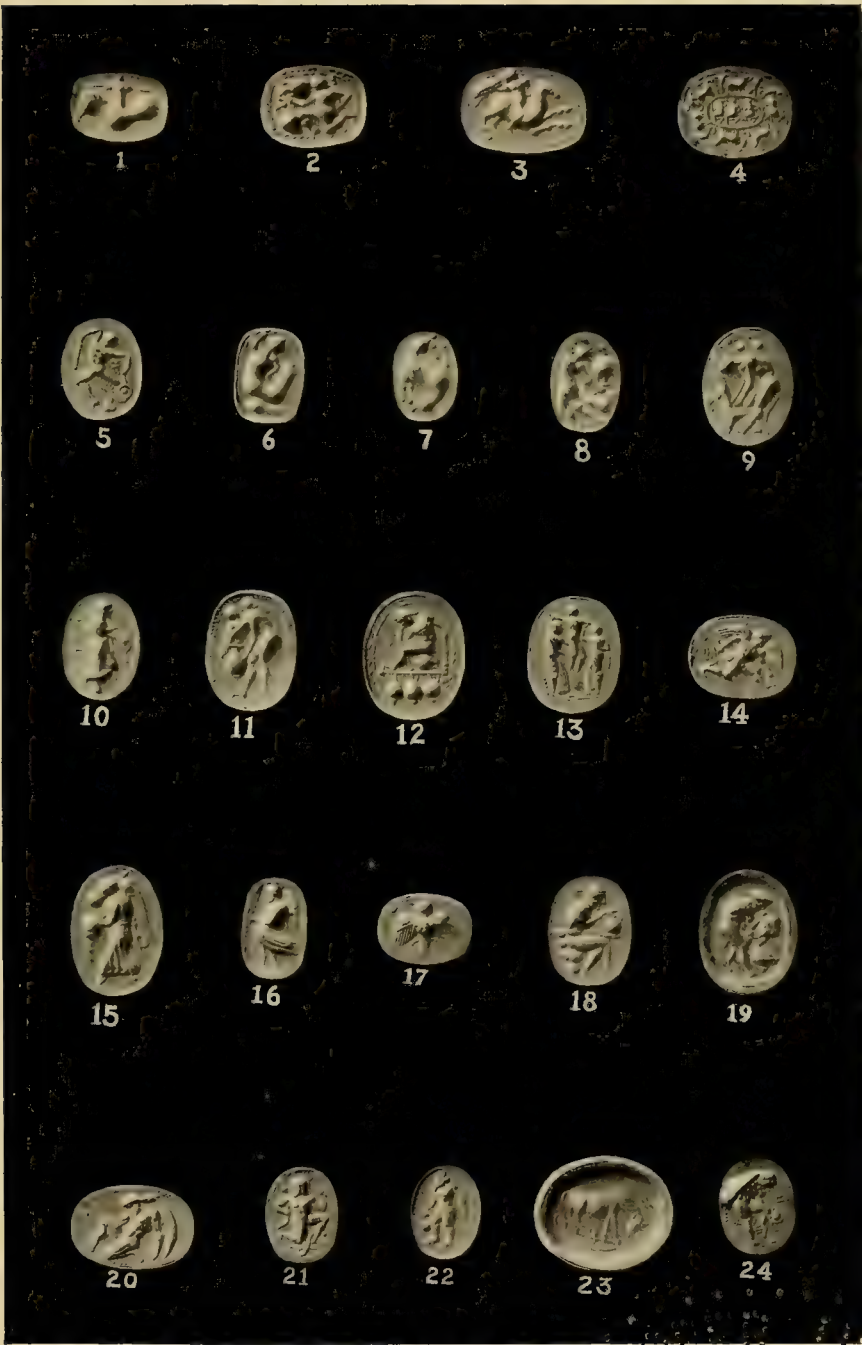
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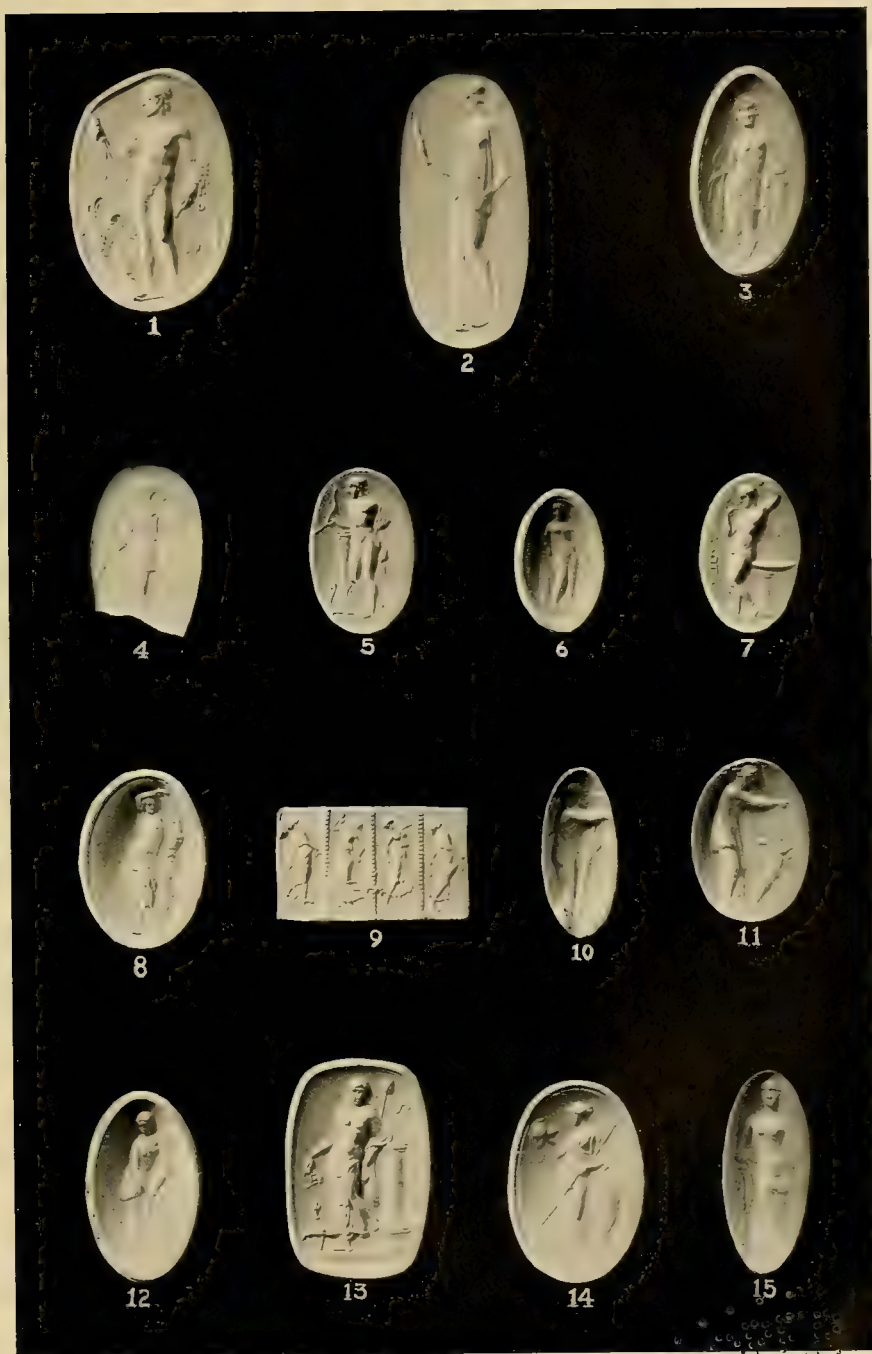
ETRUSCAN SCARABS



ETRUSCAN SCARABS.



ETRUSCAN SCARABS



HELLENISTIC GEMS



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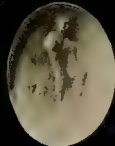
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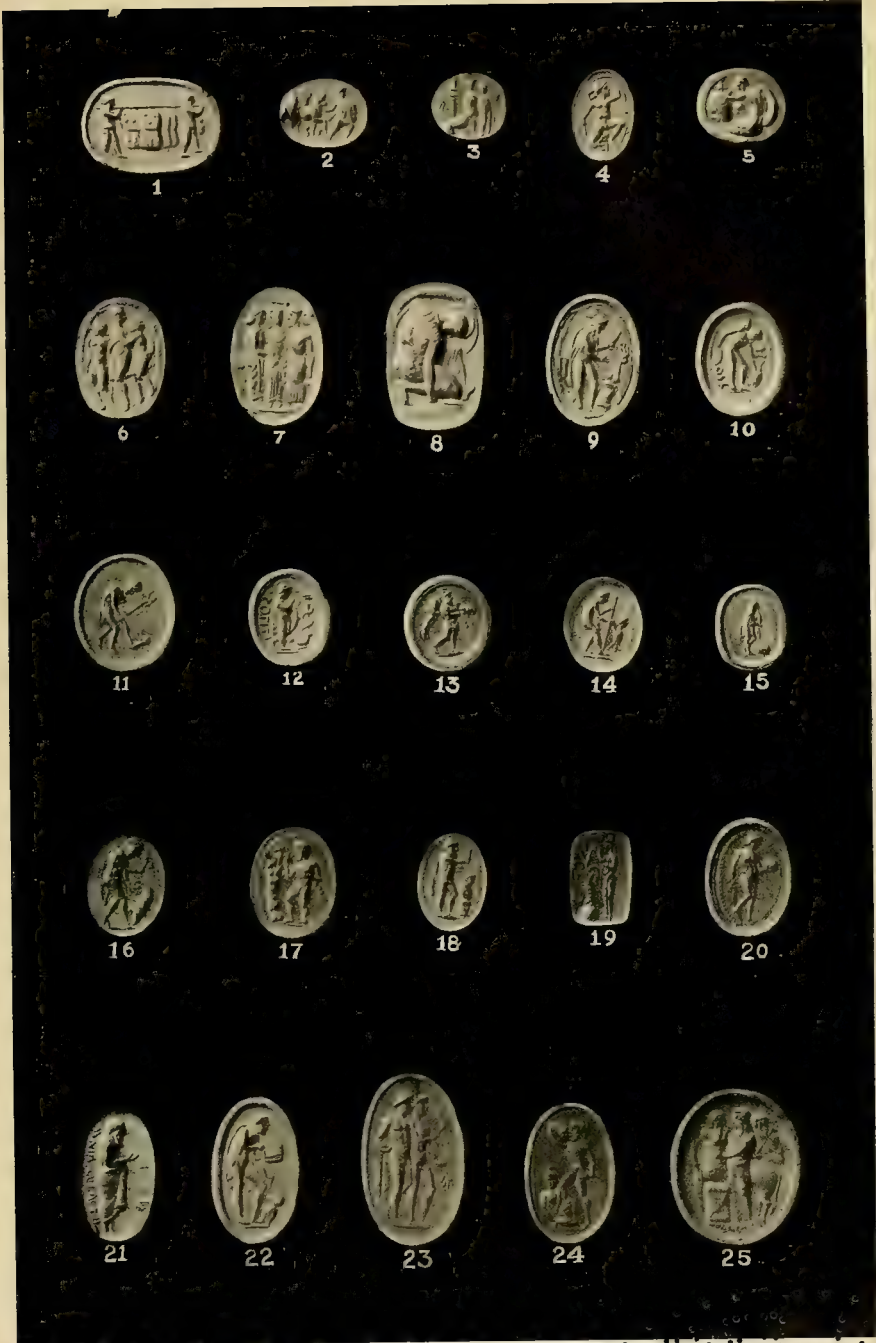
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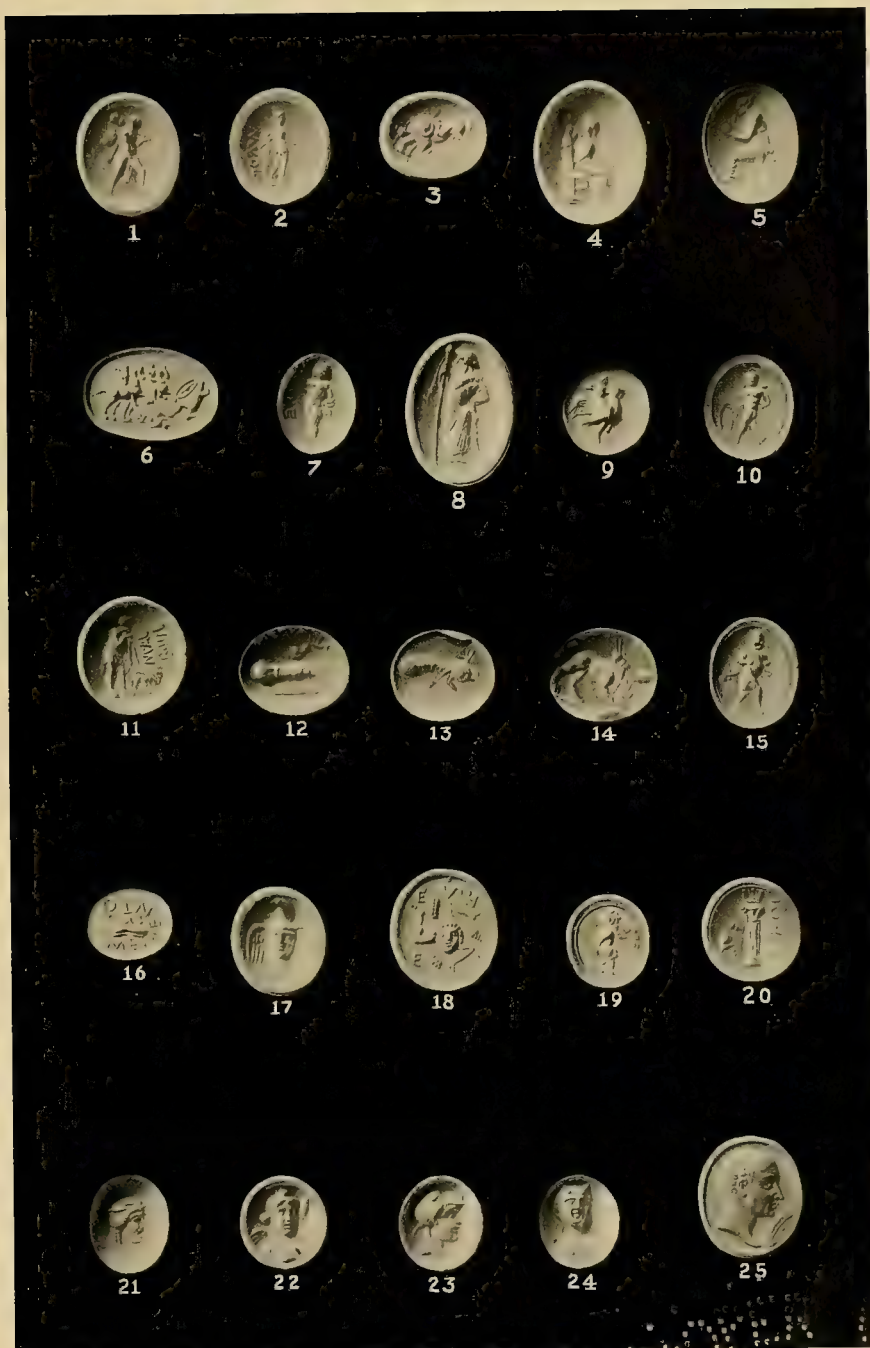
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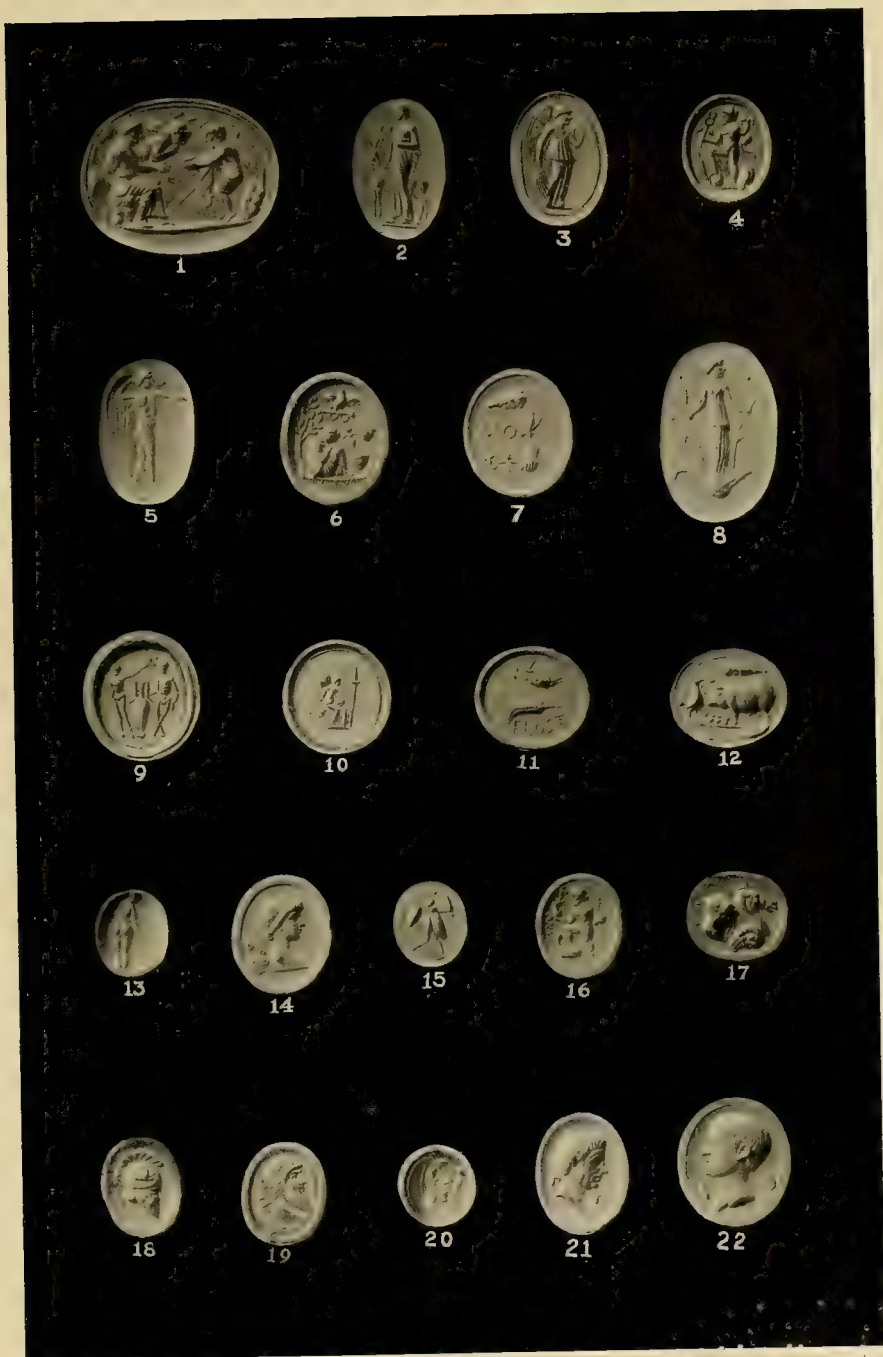
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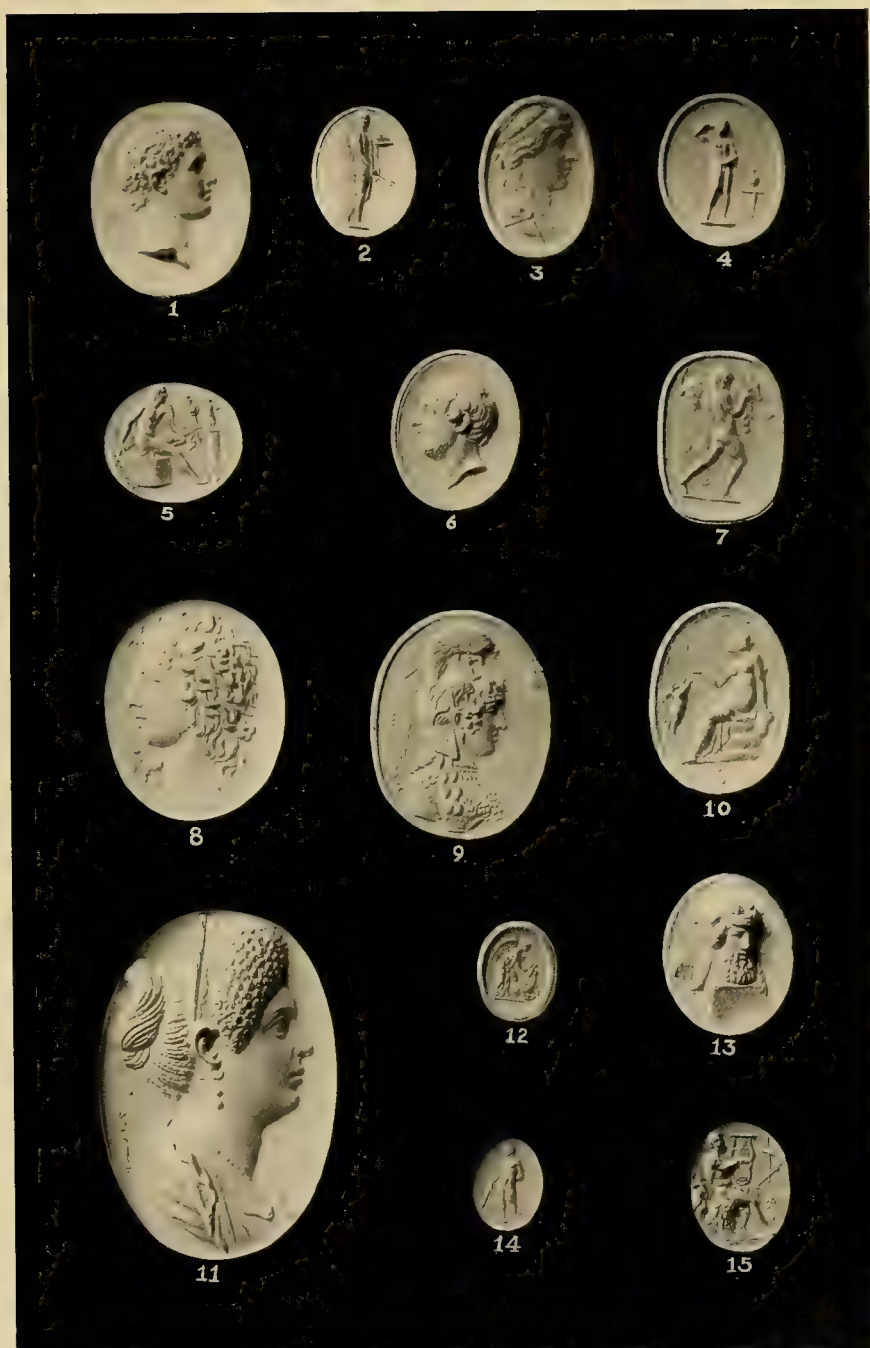
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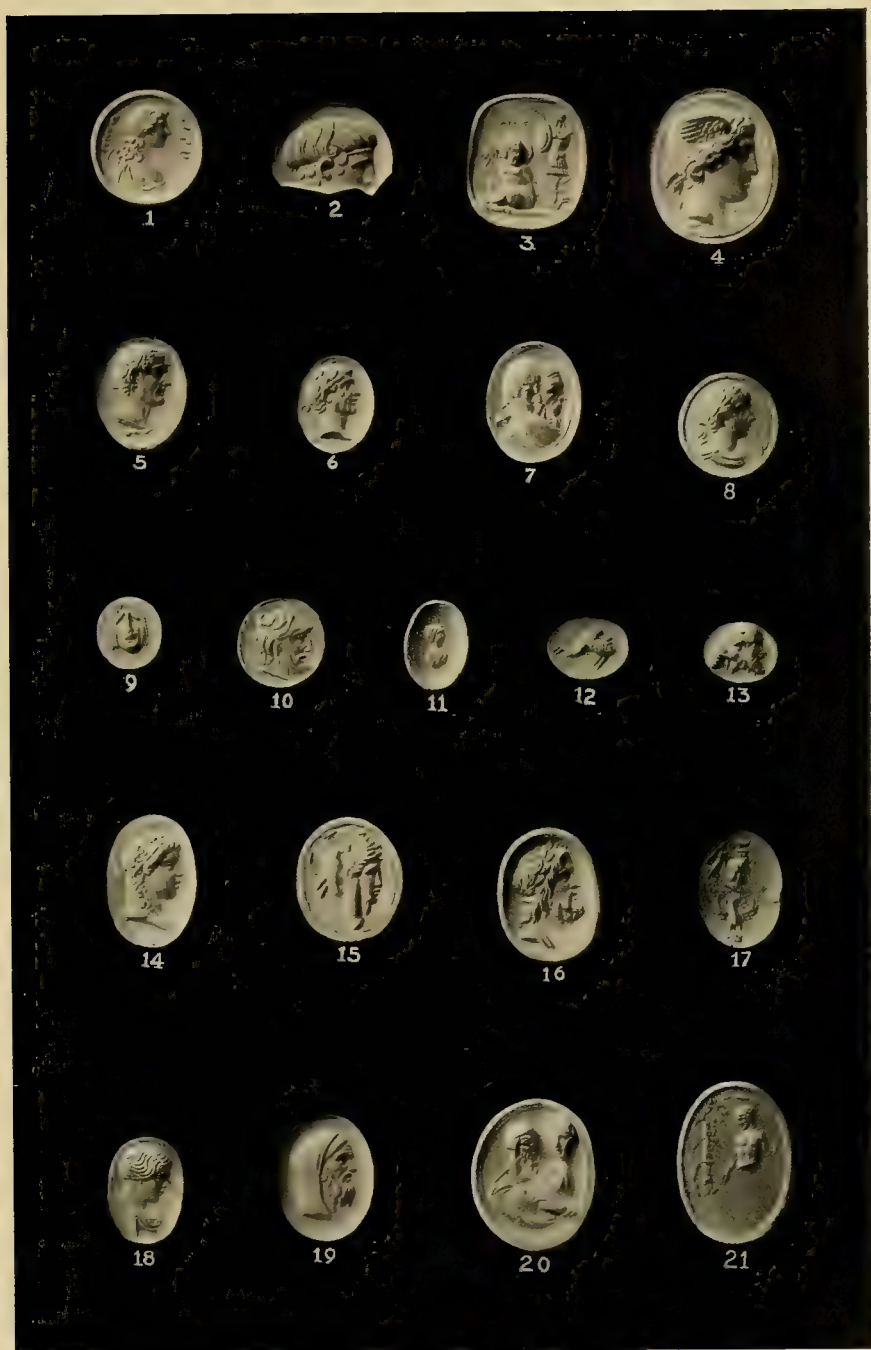
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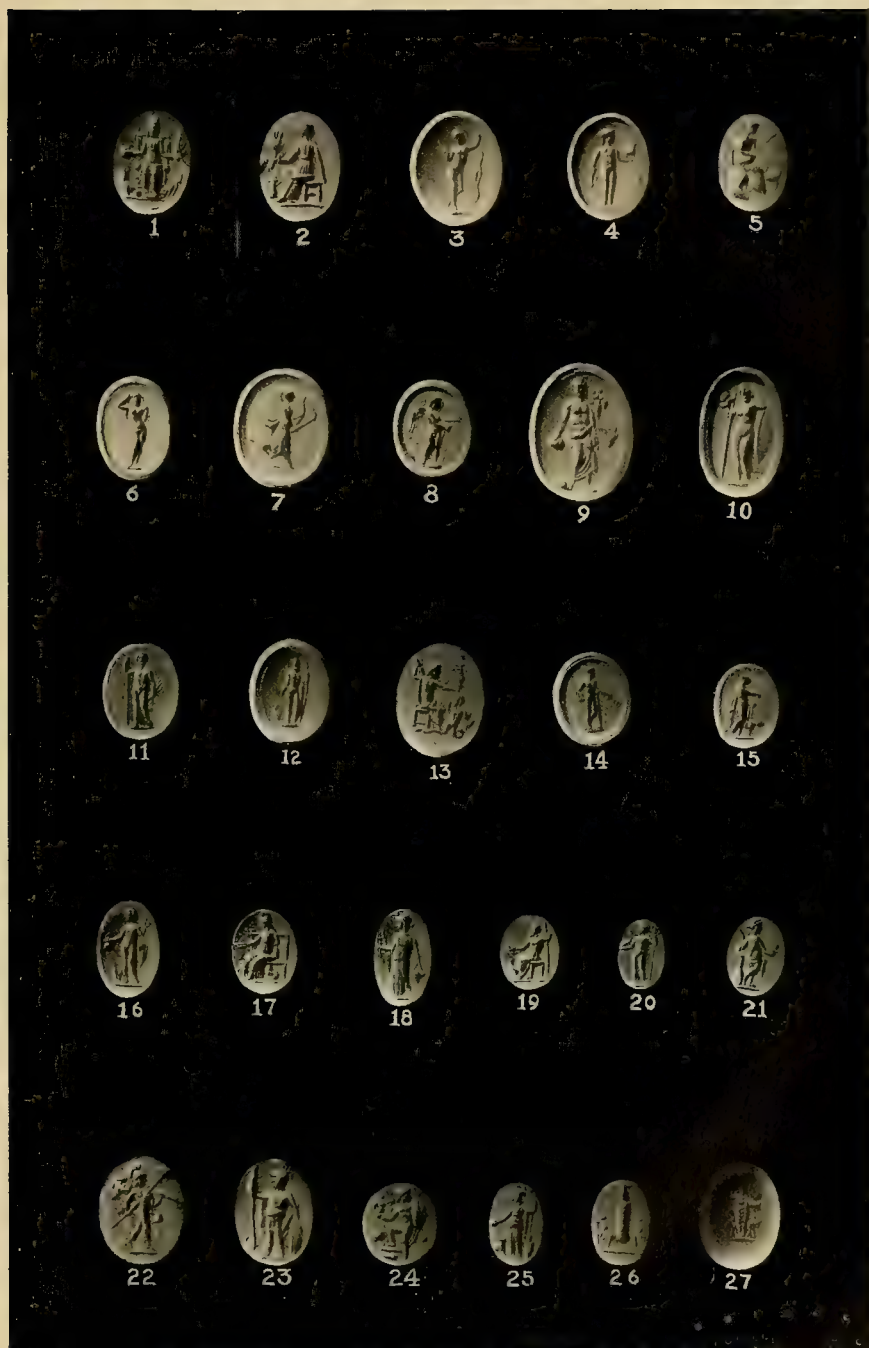
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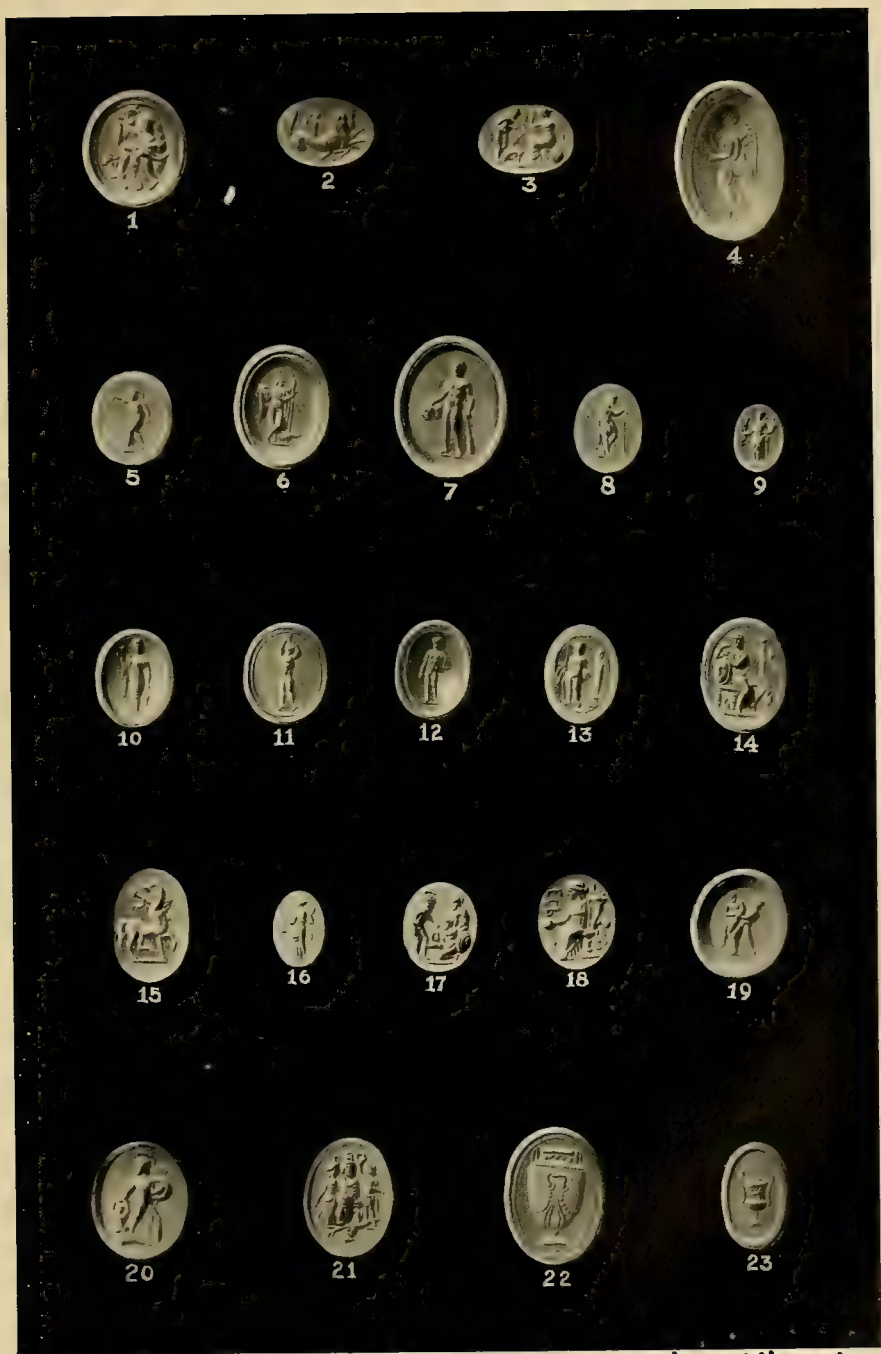
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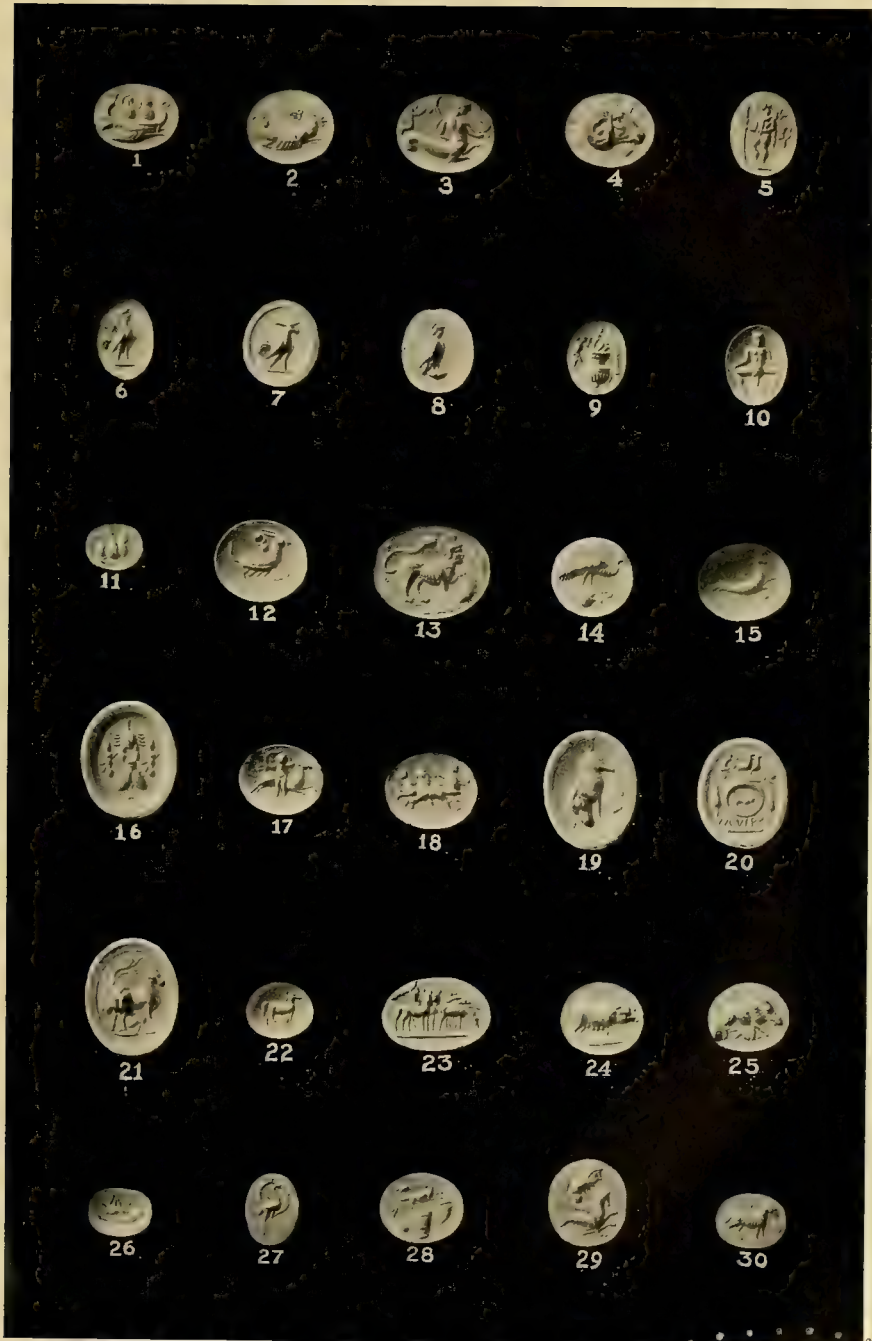
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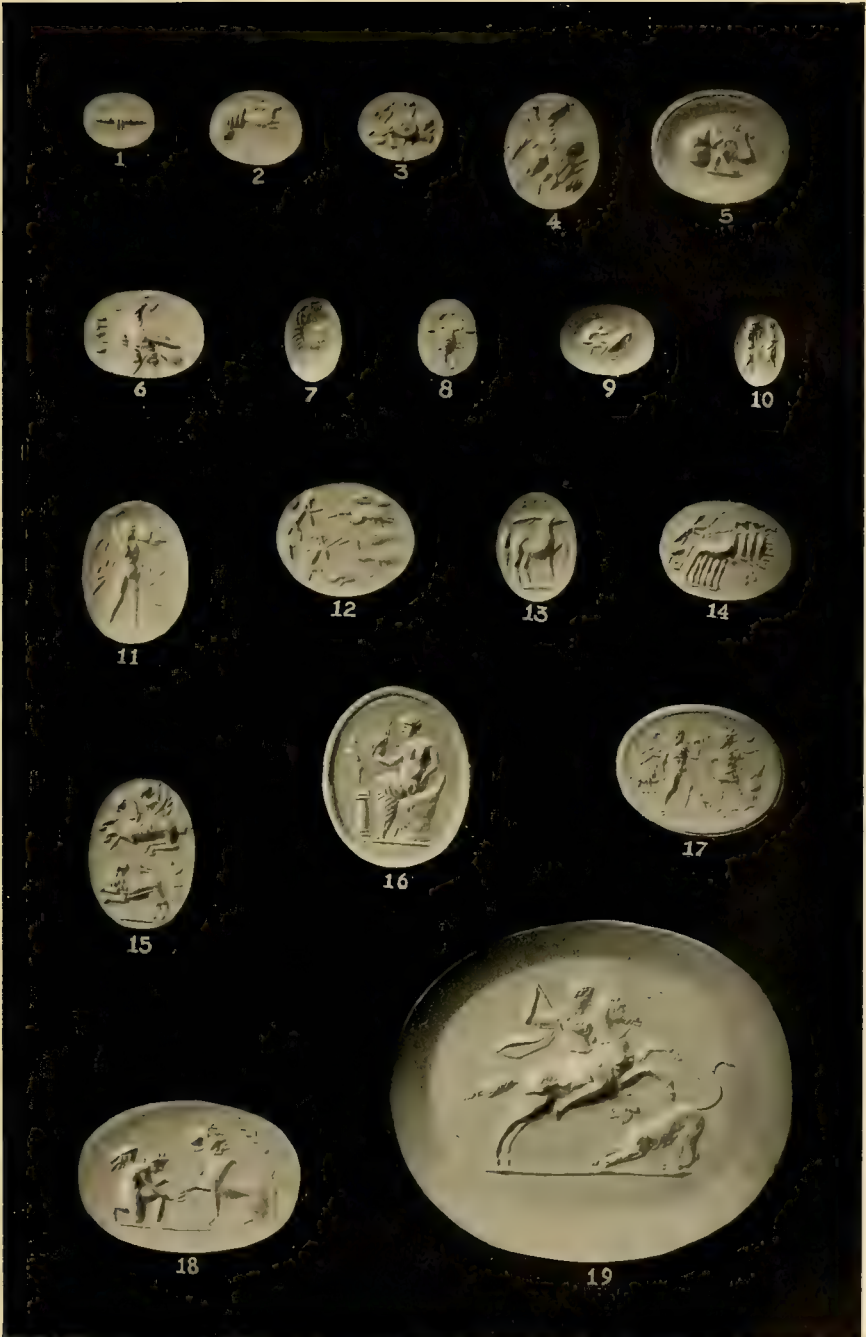
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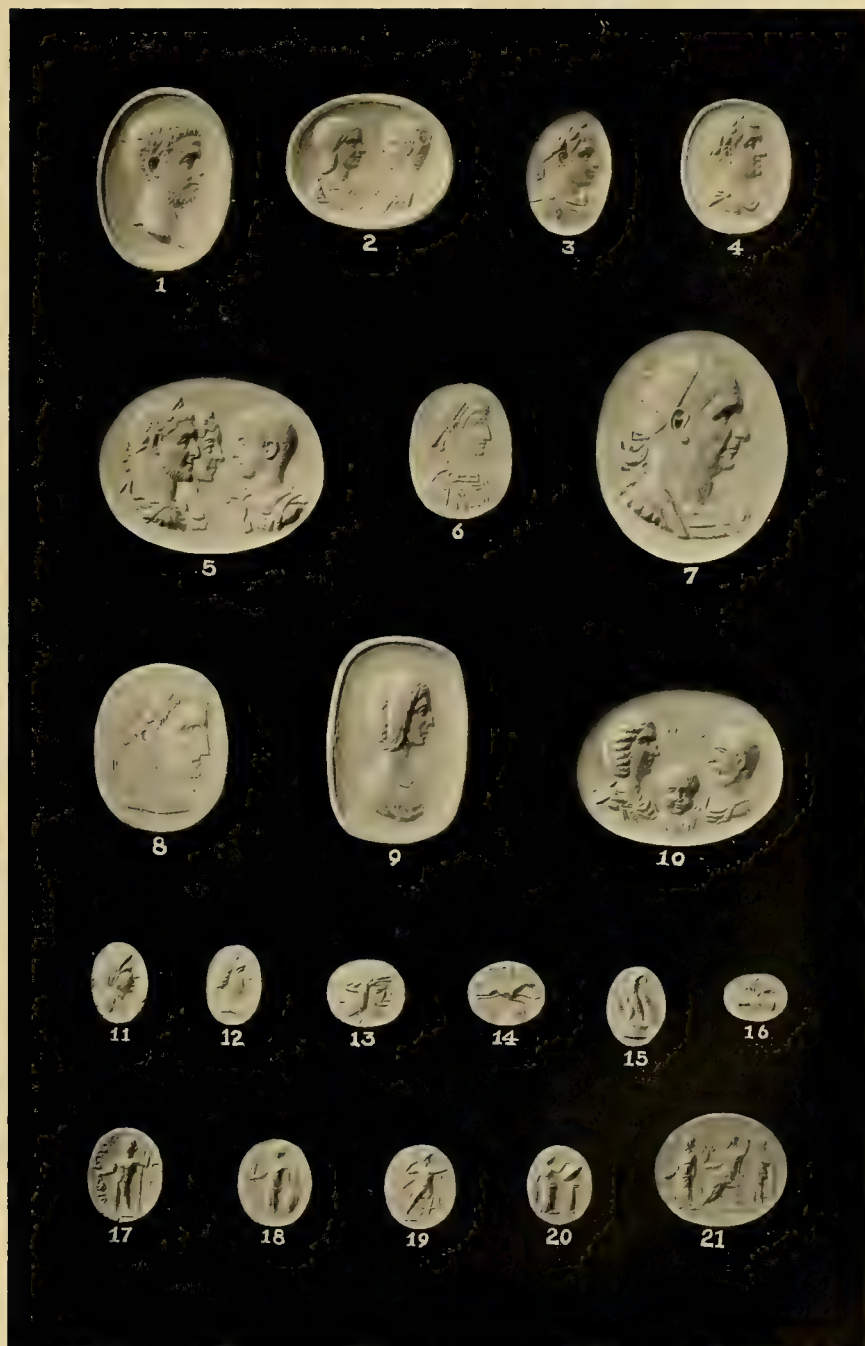
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GEMS OF THE LATER EMPIRE



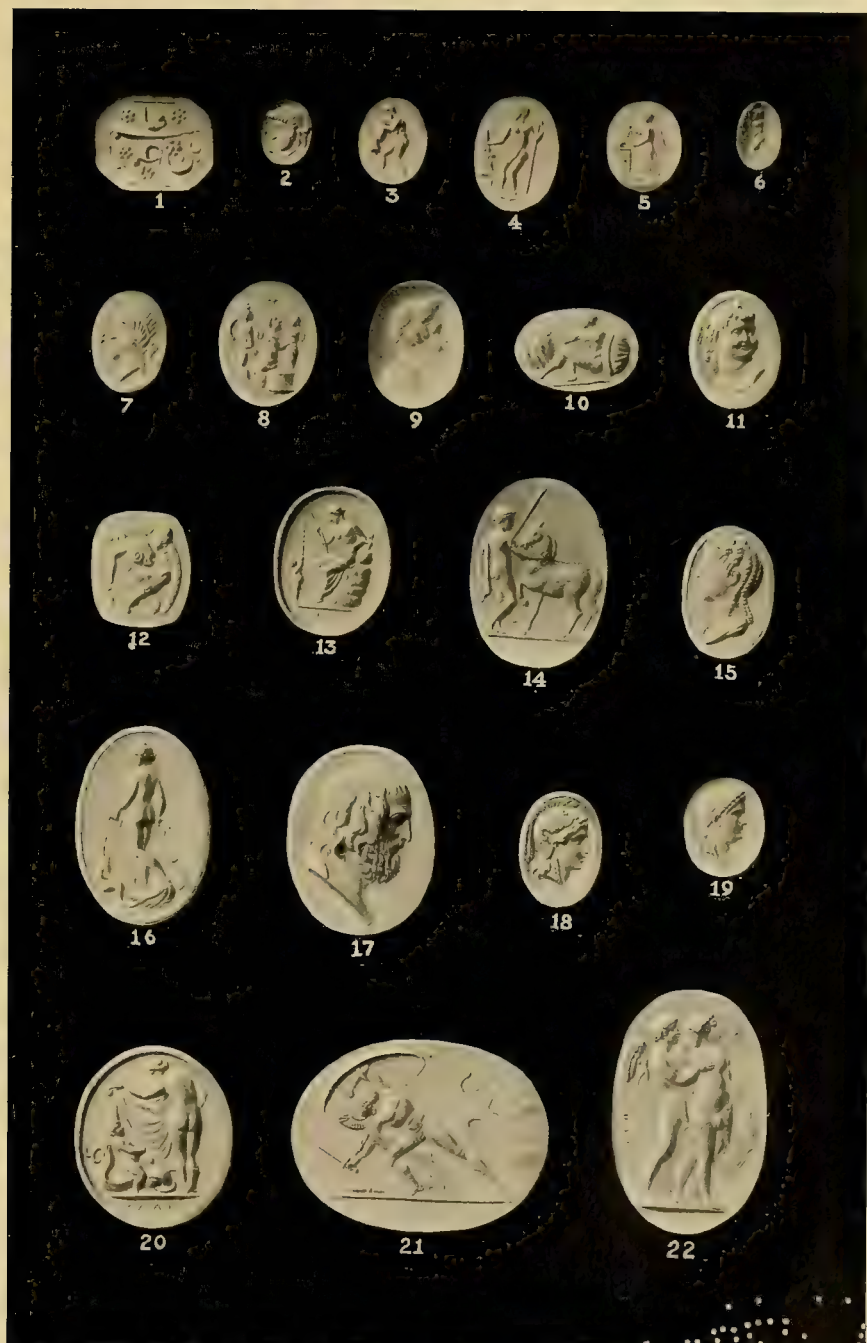
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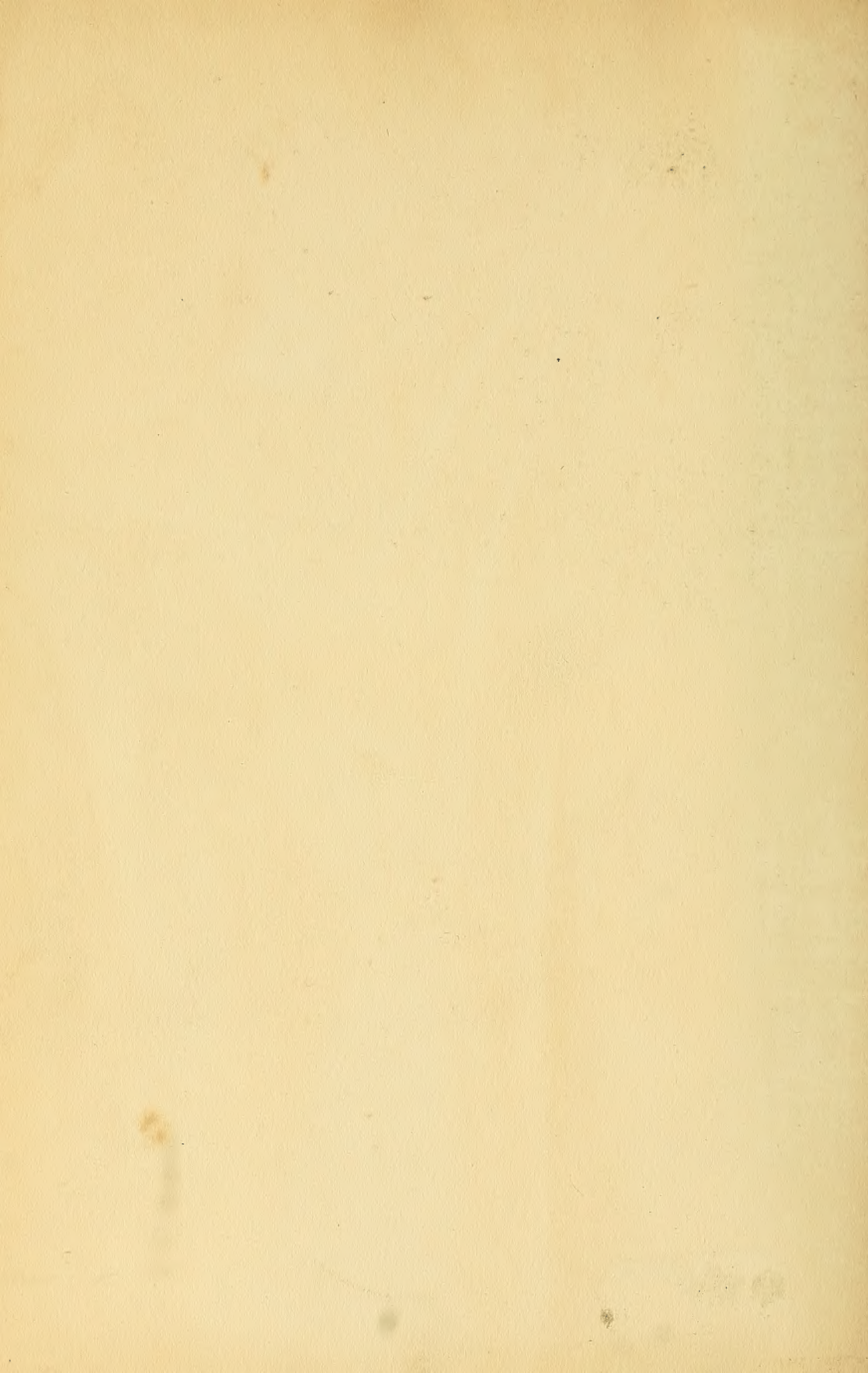
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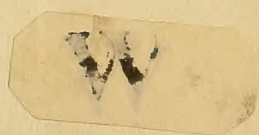


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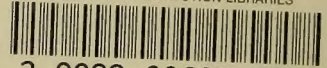


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